



ASMAN KADIR ENGINEERING & FABRICATION SDN. BHD. (240313-H)
Petropas License : 1,240313-H

#### **Head Office**

No.11, Jalan Ekoperniagaan 1/29, Taman Ekoperniagaan, 81100, Johor Bahru, Johor Darul Takzim, Malaysia **T** +607-871 1177 **F** +607-871 1199 **E** enquiry@akef.com.my **W** www.akef.com.my

#### **Fabrication Yard Address**

PLO 210, Pelabuhan Tanjung Langsat, Perindustrian Tanjung Langsat, 81700. Pasir Gudang, Johor, Malaysia.



# CORPORATE PROFILE







01 ABOUT US

02 - CORPORATE STRUCTURE

03 QUALITY POLICY

- VISION & MISSION

04 OCCUPATIONAL HEALTH & SAFETY POLICY

05 - 06 ENGINEERING & FABRICATION YARD

07 - 10 OIL & GAS DIVISION

11 - 12

MARINE BUSINESS DIVISION DIVISION

13 - 14 SUBSEA BUSINESS 15 - 16 VALVE BUSINESS DIVISION

17 -18

LEGATEST IN-SITU/ ONLINE VALVE TESTING

19 - 22

POWER GENERATION DIVISION

23

AKEF GLOBAL PARTNER

24 COMPANY REGISTRATION 25 - 28 PROJECT HIGHLIGHT



# **CORPORATE STRUCTURE**

MANAGING DIRECTOR

MARINE BUSINESS DIVISION

POWER GENERATION DIVISION

DIVISION

VALVE BUSINESS

OIL & GAS DIVISION SUBSEA BUSINESS DIVISION

## **ABOUT US**

#### STRONG FOUNDATIONS

Backed by more than a decade of experience in providing the total Engineering, Procurement and Construction (hereinafter in referred to as "EPC") service for various industries, Asman Kadir Engineering & Fabrication Sdn. Bhd. (hereby known as AKEF) has come a long way to be recognized as a reputable industry player in Malaysia since establishment in 1992.

Our comprehensive workshop facilities and certification that have met the highest standards, as well as accreditations by various statutory, regulatory and professional bodies, are a testament to the top quality assurance which we provide. Building on the foundation, we will continue to raise quality and service standards to greater heights to ensure client's total satisfaction.





To become the industry leader renowned for spearheading the total suite of one-stop, EPC service to raise infrastructure perfection to greater heights.



- ► To provide the most efficient, sustainable and reliable EPC services, guide by our total quality management approach.
- ► To strive for continuous technological innovations so as to power our client's infrastructure needs with the most advanced and achieve greater efficiency.
- ► To engage our clients actively and uphold a personalised approach in project management, thus surpassing clients' expectations and achieving service excellence.
- ► To develop the best talents for the industry by enhancing professionalism, fostering commitment and inculcating a can-do spirit among our staff.

## **QUALITY POLICY**

The management and the employees of Asman Kadir Engineering & Fabrication Sdn. Bhd. are committed to ensure the company objectives are met and providing our clients with the comfort and satisfaction of achieving and exceeding their requirements and expectations.

This will be achieved by adopting a continuous improvement of our Quality Management System through:

- ▶ Ensure we understand our Client requirements; legal and other requirements are satisfied and comply to the best of our ability.
- ► To strengthen relationships and encourage repetitive business with existing Clients.
- ► To win work not solely on price but through innovation and value added services.
- ▶ Continually strive to improve our performance through analysis and to reduce the occurrence of nonconformity at all levels of business and stages of a project.

- ▶ Effective and efficient management of company human resources that helps the realization of projects in advance of set deadlines, conforming to every quality standard prescribed.
- ▶ To prioritize and value the most valuable asset of AKEF, company employees, and to contribute to their technical and self-development through company's structured training programs leading to motivation & empowerment, and to provide social securities.
- ► To engender a positive commitment to quality and create an environment of teamwork and coorperation that enables employees to work effectively.
- ► To take action plan to address company risks and opportunities by identifying internal and external issues, QMS process and interested parties.

AKEF acknowledges that it is incumbent on employees at all levels to ensure that the provisions of the Quality Management System are attained. This is achieved by effective communication and employee's acceptance of their responsibilities with respect to fulfilling the Company's quality objectives.



It is the responsibility and commitment of Asman Kadir Engineering & Fabrication Sdn. Bhd. to provide safe and healthy working environment for our employees through:

**& SAFETY POLICY** 

- ▶ Provide safe and healthy working conditions for the prevention of work-related injury and ill health for its employees, contractors and visitors,
- ► Eliminate hazards and reduce OH&S risks by considering the purpose, size and context of the organization
- ► Comply with all applicable safety and health laws and regulations
- ► Continuos improvement of the OSH management system
- ▶ Develop and enforce the use of safe working practices
- ▶ Provide consultation and participation of workers and training to employees to conduct their work in safe & health manner.

In conducting our business activites, employees of AKEF and contractors shall strive to:

- ► Prevent all occupational illness
- ▶ Prevent all accidents and injuries
- ▶ Prevent property damage

It shall be the duty of every employee to:

- ► Commit the above objectives
- ► Report hazards
- ► Cooperate with management, participate in safe and health programs and comply with all applicable safety OSH laws and regulations.

The application of sound safety and health practices for the protection of our people is an essential factor in the overall success of our business.





# **ENGINEERING & FABRICATION YARD**

In partnership with our valued partner, Seagull Pte. Ltd., a Singapore-based company specializing in subsea engineering, fabrication supplies, and services, our fabrication yard is strategically located within the Tanjung Langsat Marine Terminal. The yard features deep-water berths and modern infrastructure. With expansive facilities and comprehensive logistic support, it is fully equipped to deliver top-tier fabrication services with efficiency and scale.

The workshop covered area has the production capacity, subject to proper issuance of drawings, cutting plans, and material availability, as follows:

- 1. Primary Structure Fabrication 400 to 500 MT per month
- 2. Secondary Structure Fabrication 300 to 400 MT per month
- 3. Tertiary Structure Fabrication 150 to 250 MT per month

# No capital Control of the Control of

## **CAPACITY**

	Covered Workshop	Open Yard
Area (sq ft)	60,000 sq ft	90,000 sq ft
Crane (Crane Hook Height 32ft)	20MT 25MT	Gantry Type 35MT
CNC Machines	4 units	<u>-</u>
Floor Capacity	5 tonnes/ sqm	-
Blasting & Painting Chamber	3,000 M3	-

#### **CORE CAPABILITIES:**

- ➤ Access to waterfront facility (545mtr quay length with 11mtr Draft and Capacity (DWT)- 40,000
- ► Coating Shop
- ► CNC Plate Cutting Machine
- ► Rolling Machine



#### **SERVICES WE CAN OFFER:**

- ► Heavy structural fabrication
- ► Mechanical and piping works
- ► Skid and modular assembly
- ► Electrical & instrumentation works
- ► Surface preparation and painting
- ▶ Pre-commissioning and loadout



**Fabrication Yard Address** 

PLO 210, Pelabuhan Tanjung Langsat, Perindustrian Tanjung Langsat, 81700. Pasir Gudang, Johor, Malaysia.

## **OIL & GAS DIVISION**

#### **OIL & GAS**

Given the burgeoning developments in the construction, infrastructure, as well as oil and gas industries in the region, AKEF has the expertise to keep various sectors well-oiled, literally. With in-depth competencies in turnkey project management and budget development, we have the edge to offer the full range of services, from fabrication, construction, transportation, installation, commissioning, inspection and maintenance of onshore and offshore structures and piping works.

Coupled with specific skills in fabricating and constructing topsides, process skids and modules, jackets, accommodation modules and living quarters, we have become the trusted vendor for oil and gas production facilities, gas processing plants, oil refinery plants and petrochemical plants.

Combining onshore process plant expertise with offshore module fabrication experience, we will continue to spearhead premium value-added services and go the extra mile to deliver the best quality for the oil and gas industry.

Well-trained, competent and experienced in all aspects of project management, the team at AKEF is committed to offering total engineering and construction solutions to satisfy the needs of its clients from diverse industries. At AKEF, our professional capabilities span various fields. Whether it is providing marine services to meet shipbuilding needs across different countries, driving power plants with energy solutions, or customising structural and piping works for the oil and gas industries, we have developed the edge to execute a wide array of projects through our three business divisions as follows.





## **PROJECT HIGHLIGHT**

#### **PROJECT**

▶ FPSO Cendor Phase 2

#### SCOPE

- ► Fabrication, Installation and Testing of Hull / Vessel Piping Systems in Cargo Tanks, Ballast Tanks, Pump Room, Fwd Pump Room and Main Deck
- ► Facbrication, Installation and Testing of Topside Piping System

**LOCATION** ► MMHE Pasir Gudang, Johor **YEAR** ► Dec 11 - May 14

**HOST / OWNER ►** MiSC Berhad / Petrofac (M) Sdn. Bhd. **DIA-INCH INFO ►** 

Vessel: 85,000 DIA Inch / Topside Piping: 110,000 DIA Inch



#### **PROJECT**

▶ Malikai TLP Project

#### SCOPE

► Fabrication and Installation of Structural Columns and Pontoon

**LOCATION** ► MMHE Pasir Gudang, Johor **YEAR** ► Mar 15 - Jan 16

**HOST / OWNER ►** Sabah Shell Petroleum Co. Ltd. / MISC **WEIGHT INFO ►** 

SW Column: 1350 MT / South Pontoon: 340 MT





#### **PROJECT**

▶ Dan Gote Calm Buoy Project

#### SCOPE

► Structural, Piping and Mechanical Works

LOCATION ➤ MMHE Pasir Gudang, Johor YEAR ➤ Nov 16 - Feb 18 HOST / OWNER ➤ SOFEC Inc WEIGHT INFO ➤ 1200 MT



#### PROJECT

▶ PFLNG Turret

#### SCOPE

► Turret - Structural & Piping Works

LOCATION ► MMHE Pasir Gudang, Johor YEAR ► Oct 16 - June 17 HOST / OWNER ► SOFEC/ Petronas Carigali

WEIGHT INFO ▶ 2800 MT

#### **PROJECT**

► Bekok A & B Project

#### SCOPE

➤ Structural, Piping & Mechanical (Multidicipline Package) og 2 nos of WHP Topside, Jacket and Bridge

LOCATION ► MMHE Pasir Gudang, Johor YEAR ► Jan 20 - Jul 20 HOST / OWNER ► Petronas Carigali



#### **PROJECT**

► Kawasari CPP Topside

#### SCOP

► Piping Erection Works - Spools Installation, Testing and Reinstatement Works of Varoius Piping Material (CS, SS, DSS, CuNi) 65,00 Dia-Inch 250MT Pipe Support

LOCATION ► MMHE Pasir Gudang, Johor YEAR ► May 21 - Aug 23 HOST / OWNER ► Petronas Carigali



#### PROJECT

► Rosmari Marjoram Fixed Offshore Platform

#### SCOP

► Fabrication and Assembly of Topside Structure and Mechanical Installation Works Topside Loadout and Sailaway 26th Sep 2024

LOCATION ► MMHE Pasir Gudang, Johor YEAR ► Jan 23 - Sep 24 HOST / OWNER ► Sarawak Shell



# MARINE BUSINESS DIVISION

#### **MARINE**

The Marine division is capable of building, repair, life extension (RLE) and conversion of various types of ships to meet various demands from its clients. It provides engineering and construction capabilities for various type of ship and offshore structure and carries out all phases of project implementation.

## ▶ Oil Tankers ► Onshore Support Vessels ► Anchor Handlers ▶ Platform Supply Vessels ► Crew Boats ► Drilling / Tender Barge SHIP REPAIR, REFURBISHMENT **AND MAINTENANCE** ► Precision machining ▶ Pipe fabrication ► Hull refurbishment ► Electrical works ► Mechanical works ► Supply of spare parts ► AQUASTAR™ Ballast Water Management System (BWMS) Retrofit **ENGINEERING FABRICATION AND CONSTRUCTION** ► FPSO / FSO / FSU Conversion ► Jack Up/ Semi Sub/ Tender Rig Conversion ► AQUASTAR™ Ballast Water Management System (BWMS) Retrofit FPSO KIKEH

#### SHIPBUILDING

- ► Tugboats
- ▶ Barges
- ► Container Shipping Vessels

# SUBSEA BUSINESS DIVISION

#### **SUBSEA**

We are specialist in Engineering, Procurement & Construction services for the offshore & subsea sectors, with proven track records. We have fabricated complicated structures and equipment like production risers, grillages, stab frame, mudmats, pig launchers, subsea spools, midspan bracings, conductor clamps, subsea templates, christmas tree guard structures etc. Our team have a sound knowledge in understanding the requirement needed for each project and ensure that international standards are met. We are committed to delivering the finished product within the time frame and of the highest standards using our water front facility. AKEF offers comprehensive subsea solutions to diverse client ranging from the sophisticated technical needs of major oil companies to the specific needs of ship owners and operators. With a pool of skilled personnel and state of the art equipment, AKEF is capable of honoring and exceeding client expectations. AKEF is a renowned provider of subsea and pipeline / flowline engineering, field architecture development, and project management solutions. Our clients include major and independent oil companies, as well as equipment manufacturers, who are looking for dependable and cost-effective answers in all phases of their offshore projects.

















# VALVE BUSINESS DIVISION

#### INTRODUCTION

In fluid handling and processing systems, valves play a critical role—i.e., regulating the flow and pressure of fluids to within an acceptable range for maximum operational efficiency and operator safety. As such, they must be regularly subjected to inspection and maintenance operations to ensure they remain in proper working order. Failure to maintain them can lead to lower processing efficiency and, in extreme cases, component or system failure.



#### **OUR EXPERTISE EXPERIENCE**

Our team is ready to support our customers from regular supply valves on your requirements, repairs and maintenance planning through to complete lifecycle and execution. We also offer maintenance supervision for our customer on installing based and support a long-term maintenance need. Our service work with both new equipment purchase, installation, modernizing and upgrading existing part as well as preventive maintenance activities to ensure that the recommended maintenance services have been followed and completed on a safe standard. We also provide Valves Test, Repair and Calibration Service for All Type of Valves and Valve sizing (Ball valve, Butterfly valve, Choke valve, Diaphragm valve, Gate valve, Globe valve, Knife valve, Needle valve, Pinch valve, Piston valve, Plug valve, Solenoid valve, Spool Valve and etc). We are also accredited under ISO9001 & ISO45001.



#### **ENGINEERING SERVICES**

- ➤ Good customer service & Engineering Services does not end with the sale, it is only the beginning.
- ➤ We will support you with professional installation & commissioning, troubleshooting, and engineering service include reverse engineering of control valve.

# VALVE MAINTENANCE & SERVICES (ALL TYPE OF VALVE)

- ➤ Service maintenance, overhaul & testing (workshop & In-situ)
- ► Valve preventive maintenance and corrective maintenance
- ► In-situ valves machining and services
- ► Valves flushing, lubrication & sealant on-site
- ► Manage and execute shut-down and preventive maintenance
- ► Actuator valve service and repair
- ► Fabricate and supply new parts (soft parts & metal parts)
- ► Supply competent manpower

# INSTRUMENT / ELECTRICAL MAINTENANCE, SERVICE TESTING & RE-CALIBRATION

- ► In-situ maintenance, service & overhaul
- ► Control valve on-site calibration
- ► Transmitter annual calibration
- ► Plant commissioning and start-up
- ► Control valve actuator refurbish and service
- ▶ Built-up control valve control panel and system
- Supply competent manpower
- ► Safety valves pop-test and recalibration on-site

#### **TESTING & COMMISSIONING**

➤ This service includes installing, testing, commissioning and maintenance of various type of valves.

#### SUPPLY OF VALVE AND SPARE PARTS

► As an Authorized Distributor for S&S, Samshin, Unicon & SVC Valve in Malaysia and Singapore, we provide a wide range of valve products include control, cryogenic, manual,safety valve & the spare parts.











#### **ONE STOP SOLUTION PROVIDER**

We carry out on-site and in-house valve servicing inclusive of re-conditioning, replacement of parts, testing & calibration as well as ensure continuous production with periodical & preventive valve maintenance and repair service. We are a one-stop valve service on maintenance process from dismantling, overhaul and repair through to re-installation, commissioning and replacement. We know that all valves must be repaired at a certain period, as incorrect valves repair services will cause a part of safety risks. Therefore, with our experienced technical team which are well trained, We always ensure our customers to receive quality valves that meet their expectation after maintenance to receive a longer lifetime. As an Authorized Distributor for S&S, Samshin, Unicon, Dong Kang Metal and SVC Valve in Malaysia and Singapore, we provide a wide range of valve products include manual valve (casting & forging), control valve, cryogenic valve, safety valve & etc which can be referred on our website.

# LEGATEST IN-SITU / ONLINE VALVE TESTING

#### WHAT IS IN-SITU/ ONLINE VALVE TESTING?

Online valve testing typically refers to the process of testing and monitoring valves while they are in operation, without the need to shut down the entire system.

This is done to ensure the valves are functioning correctly and to identify any potential issues before they lead to more significant problems or failures. It also to comply with the legal requirements and codes.

# WHY ON-LINE (ON-SITE, IN-SITU, DURING OPERATION...) VALVES TESTING?

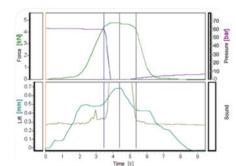
- ▶ Less shut downs less production loss!
- ▶ No system discharges no fuel costs!
- ▶ We improve the environmental conditions!
- ▶ No stress on pressure equipment joints, pipelines...
- ▶ No removing safety valves from the system we save time and money.

# SAFETY VALVES FUNCTIONS CAN BE MONITORED AND TESTED WITH GREATER ACCURACY, THAN CONVENTIONAL PSV TESTING ON THE TEST BENCH. HOW?

- ► Because, Legatest is a special high accuracy on-line testing device.
- ▶ By keeping the requirements of the standard EN ISO 4126-1:2013, chapter 7.2.3: »The uncertainty of pressure measurement shall be within +- 0,5% in the temperature range between -15°C up to 60°C. «. How is it possible?
- ▶ With an innovative approach to some limitation overcome.
- ► With an innovative approach in the introduction of testing methods during operation.
- ► With a very good knowledge of the operation of safety valves and process pressure equipment.

With a daily using the Legatest device for on-line safety valve testing like Conformity Assessment - Inspection body since 1996!







## WHY IS ELECTRIC MOTOR DRIVE BETTER THEN HYDRAULIC?

- ► The safety valve is not closed after the test. We don't have enough difference between system working pressure and safety valve opening point! How to overcome this unpleasant situation?
- ▶ Opening pressure is sometimes hard to determine. Why?
- ► How motor drive influences on safety of work?
- ► The valves are sometimes installed in very inaccessible areas.

  Management of the test should be done so by vast distances.
- ▶ How the on-line testing with Legatest could be extremely effective?

#### IN SOME ENVIRONMENTS IT IS DIFFICULT TO ACCESS OR PROHIBITED BECAUSE OF POTENTIALLY EXPLOSIVE AREAS...

Legatest device can be use in potentially explosive atmospheres according to directive 94/9/EC. EC Type Examination Certificate Nr: SIQ 11 ATEX 134 X for Ex cones: II 2 G Ex d(ib) ib IIC T4 Gb as same as approved: Certificate of Conformity.

# LEGATEST DEVICE APPLICABILITY OF USING IN THE EXECUTION FOR OTHER ON-LINE TESTS

Regarding on innovative solutions and high accuracy technology, on-line safety valve testing device Legatest can be performed also for on-line, under operating testing of other valves types:

- ► Pilot assisted safety r.valves
- ▶ Pressure Vacuum relief valves
- ▶ Pneumatic control units assisted safety r.valves

On Line Safety valve testing / inspection method, Legatest device and the L-plan as a Conformity Assessment - Inspection Body are approved by:

- ► TÜV Nord Germany
- ▶ Bureau Veritas
- ► Slovenian Acreditation institute
- ▶ DET Norske Veritas
- ▶ Slovenian Quality Institute







# POWER GENERATION DIVISION

#### **BOILER REPAIR**

AKEF provides a comprehensive selection of boiler repair services. Our services include:

- ▶ Retubing
- ► Welding & fabrication
- ► Auxiliaries & fittings
- ▶ Refractory
- ▶ Thermal & acoustic insulation
- ► Valves service maintenance

# RETROFIT AND UPGRADE CAPABILITIES

The retrofit and upgrading method to be adopted should be decided based on result of inspection and design review.

AKEF can evaluate current boiler or HRSG unit and recommend the right retrofit and upgrade package. AKEF can provide Turn-Key EPC capacity and our services include;

- ▶ PP (Pressure Part) replacement
- ► Air and Gas system replacement
- ▶ Fuel feeding system replacement
- ► Reverse Engineering

## CONDITION ASSESSMENT SERVICES

To provide a genuine one stop option for all your inspection and assessment needs, AKEF also offer condition assessment service.







# QUALITY ASSURED BOILER INSPECTION SERVICES

# SPECIALIZED HRSG CONDITION ASSESSMENT

- ► Header Inspection
- ► Phased Array Butt Weld Scanner
- ► Water Chemistry Review / Corrosion Assessment
- ► Root Cause Analysis

#### **DETAIL SERVICES**

- ▶ Detail internal and external inspection, including auxiliary equipment
- ► Punchlist for critical work items
- ► Recommendations for both current and future repairs
- ▶ Required material list to accomplish our recommendations
- ➤ Detailed service report including photographs and electronic copy
- ➤ Detail AutoCAD drawings for report illustrations and mapping
- ► Ultrasonic data review and planning
- ► NDE review and trending
- ► Code material requirement and procurement









#### **BOILER INSPECTION SERVICE**

Visual inspection of pressure parts, gas path, steel structure and piping. AKEF will carry out evaluation of the results and present inspection report with recommendation.

#### **ADDITIONAL OPTIONS INCLUDE**

- ➤ Pre-outage walkdown and punch list report based on findings and interviews
- ► Thermographic survey to review casing, piping and identify leaks or faulty insulation
- ➤ Recommendation for specialist Non-Destructive Examination (NDE) tasks to be performed during the detailed Boiler inspection (NDE to be performed by a qualified NDE technician)
- Information Management and outage planning support

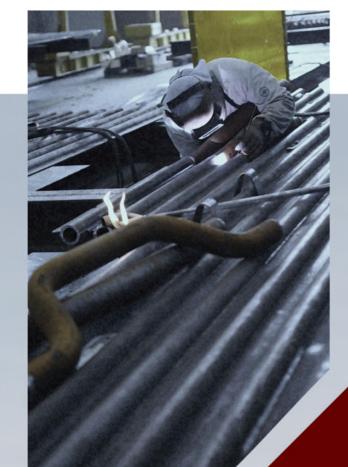
# POWER GENERATION DIVISION

## SUPPLY OF SPARE PARTS & REPLACEMENT

Regardless of the ancillary equipment required by your boiler or HRSG system, every part you need is available through the spare parts division of AKEF. Each part we offer is engineered and manufactured specifically to suit the original specifications of your equipment.

AKEF is dedicated to providing our clients with replacement parts of the highest quality delivered in a timely manner. To benefit our clients, AKEF maintains a variety of stock items. These parts are available for immediate delivery, and on very short notice.

Trust us to supply the exact replacement parts you need. You will never go wrong with our professional product knowledge. Not only can we supply OEM replacement parts such as valves, gaskets and tubes, we also provide a wide range of specialty replacement parts and upgrade items.



AKEF provides engineered manufacturing and spare parts to clients with the highest quality delivered in a timely manner. To benefit our clients, AKEF maintains a variety of stock items. These parts are available for immediate delivery, and on very short notice. Our service includes;

- ► Water wall Panels
- ► Coil/loop
- ▶ Bare tubes
- ▶ Finned tubes
- ▶ Headers
- ► Harps/ Modules
- ► Link and manifold pipe
- ▶ Piping
- ➤ Drums/Blowdown/Flash Tank/ Deaerator
- ► Fittings (Elbow, Reduce, Tee etc.)
- ► Manhole, Access Door assembly

- ► Demister and Steam Drum Internals
- ▶ Duct and casing
- Pyro-Block, H-Board, CMS, Insulation
- ► Gas Turbine Air Intake System include Filter
- ► Safety valves
- ► Motor Operated Valve
- ► Control Valve
- ► De-superheater (Attemperator) Spray Valve
- ► Gate, Check, Non-return, Glove Valves
- ► Strainer, Steam Trap

- ► Stack damper/ Diverter Damper
- ► Instrument, Thermowell,
- Thermocouple, Transmitters
- ► Burner/ BMS
- ► Level gauge/RDLI (Remote Display Level Indicator)
- ► Metallic and Non-Metallic Expansion Bellows
- ► Expansion Joint
- ▶ SCR systems
- ▶ Pump
- ► Mobile Gas Turbine Generator/ Diesel Engine Generator



#### **TRAINING**

Based on our experience, many users of boiler/ HRSG units have never been properly trained. To meet productivity targets and emissions regulation, it is crucial to operate and monitor the essential equipment in the right way every day.

By conducting on-site personal training seminars which can be tailored for specific site requirements and providing the service of technical personal assist our clients operation and maintenance team.

We have been able to ensure that O&M (Operation & Maintenance) procedure are properly and efficiently implemented. We also train the Boiler and HRSG engineering and inspection upon customer demand.

Below are some of the training programs that AKEF can provide on-site to suit our client's schedule;

- ► Thermal Review of HRSG
- ► Code/ Pressure Parts
- ► Boiler Component Engineering
- ▶ Life/ Age Analysis
- ► Operation Study
- ► Thermal Stress Analysis
- ► Vibration and Noise Engineering
- ► Failure Mechanisms
- ▶ Water Chemistry
- ▶ Boiler Inspection
- ▶ Preventive and Reactive Maintenance
- ► Piping Hanger System



HRSG training for Malakoff at Lumut Power Plant

## **AKEF GLOBAL PARTNER**



#### **PRINCIPAL**

S&S Valve Co., Ltd ► Control Valves

Samshin Limited ▶ Manual, MOV Valves

YONGKWANG Flexible Ind. Co., Ltd ► Expansion Bellows & Expansion Joints

Co., Ltd. ► Bypass, Control Valves & Attemperator SVC Inc. ► Safety Valve, Steam Trap

KTS Co., Ltd. ► Top Entry Zero Leakage Ball Valve DongSung ES

NRTEC Co., Ltd ► Silencer, Generator, GT Air Intake System

Seonghwa Industrial Co., Ltd ▶ Pipe Hangers &

Supports

Samhwa Co., Ltd ► Manufacturing of Pressure Parts

Eunkwang Bending Co., Ltd. ► Rolling, Bending & Welded Tubular Flow-Tech Water **Treatment Systems** ▶ Chemical Free Water Treatment and Management

Yoobong Corporation ► Tube Fining and Bending

▶ Steel Service

Installation/Testing) ▶ BULK HANDLINGMACHINE (Fabrication/Installation /Testing)(Fabrication, Shot Blast and Painting) ▶ Structural items

▶ Outfitting items

► CRANE(Fabrication/

**Doosung Cotech** 

PTS Power Tech Solution

► Forced Cooling System for Steam Turbine

#### **PARTNER**

HISE Co., Ltd (Korea) ► Engineering & Parts
Support in Korea Products

HEAT TECH POWER SOLUTIONS

Machineries ► Engineering & Parts ► Partner for Consulting support in MENA products Located Abu Dhabi, UAE

ValourTech

HFS Heavy Industries Seagull Pte. Ltd. ▶ Sales Partner

(Singapore) ▶ EPC & Machining for Subase Related

## **COMPANY REGISTRATION**



## **PROJECT HIGHLIGHT**

CLIENT	SCOPE	DIVISION	LOCATION	YEAR	MAIN CONTRACTOR	HOST / OWNER
Marine Repair & Conversion	Blasting & Painting Works for Marine Loading System CPC Keelung	Subsea	Pasir Gudang, Johor	Dec 92 - Jan 93	FMC	
Shipbuilding	Petronas Hull No. 060, 061, 062 & 063 Hull Outfitting (Fabrication)	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	Feb 94 - May 94	Malaysia Shipyard Engineering	
Shipbuilding	Fabrication, Testing (Leak Test) And Packing of 22 Units S/S Tote Tanks	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	Jul 94 - Dec 94	Malaysia Shipyard Engineering	
Marine Repair & Conversion	Two (2) Units of 45T Bollard Pull Z - Peller Tug	Marine Repair	MSE Pasir Gudang, Johor	Sep 94 - Mar 95	Malaysia Shipyard Engineering	
ММНЕ- АТВ	Fabrication & Assembly 8 Units of MTBE Pressure Vessels	Marine Repair	MSE Pasir Gudang, Johor	Dec 95 - Apr 96	Malaysia Shipyard Engineering	
Marine Repair & Conversion	Hull Out Fitting of Two (2) Units 699 Teu Geard Container Vessel	Marine Repair	MSE Pasir Gudang, Johor	Sep 95 - Sep 96	Malaysia Shipyard Engineering	
Shipbuilding	One (1) Unit of 48m Standby Tug/ Utility - Outfittings	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	Jul 96 - Dec 96	Malaysia Shipyard Engineering	
Shipbuilding	Contract for Two (2) Units of 699 Teu Geard Container Hull No. 074 & 075 - Outfitting Works	Marine Repair	MSE Pasir Gudang, Johor	Nov 96 - Nov 97	Malaysia Shipyard Engineering	
Shipbuilding	Four (4) Units of 6,500 DWT Product Tanker - Hull Outfitting	Marine Repair	MSE Pasir Gudang, Johor	Sep 97 - Dec 98	Malaysia Shipyard Engineering	
Marine Repair & Conversion	5600 CBM LPG Carrier (Fabrication Scavange Air Drain Tank)	Marine Repair	MSE Pasir Gudang, Johor	Aug 99 - Aug 99	Malaysia Shipyard Engineering	
Marine Repair & Conversion	Hull Out Fitting Works for Two (2) Units of 40 Tons Bollard Pull Harbour Tug	Marine Repair	MSE Pasir Gudang, Johor	Aug 99 - Feb 00	Malaysia Shipyard Engineering	
Shipbuilding	Upgrading of Self-Erecting Tender Rig-ROBRAY T6 (Hull Outfitting Works)	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	Dec 99 - Sep 00	Malaysia Shipyard Engineering	
Larut A Topside	Fabrication & Installation of Outfitting for LARUT-A Topside	Heavy Engineering Offshore	MSE Pasir Gudang, Johor	Oct 00 - Jul 01	Malaysia Shipyard Engineering	
ROBRAY T4 - Tender Rig Barge Project	Hull Outfitting Works for Conversion of TENDER RIG BARGE ROBRAY T4	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	Jul 02 - Apr 03	Malaysia Shipyard Engineering	
CHARLEY GRAVES - Tender Barge Project	Hull Outfitting Works for Conversion of TENDER RIG BARGE CHARLEY GRAVES	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	Sep 2 - Dec 02	Malaysia Shipyard Engineering	
FSO Ross Sea	Hull Outfitting Works for Conversion of FSO Ross Sea	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	Jan 03 - Aug 03	Malaysia Shipyard Engineering	
FPSO Bunga Kertas	Hull Outfitting Wokrs for Conversion if FPSO Bunga Kertas	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	May 03 - Oct 03	Malaysia Shipyard Engineering	
PIRANHA - Tender Rig Barge	Hull Outfitting Works for Conversion of TENDER RIG BARGE PIRANHA	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	May 03 - Jun 03	Malaysia Shipyard Engineering	
ROBRAY T9	Hull Outfitting Works for Conversion of TENDER RIG BARGE ROBRAY T9	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	Jul 03 - May 04	Malaysia Shipyard Engineering	
PDH Gebeng Turnaround 2004	Shutdown PDH Gebeng April 2004 with Mushtari	Refinery	MSE Pasir Gudang, Johor	Apr 04 - May 04	Malaysia Shipyard Engineering	
FSO South Angsi	Hull Outfitting Works for South Angsi A (Package B & C)	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	Jan 05 - Aug 05	Malaysia Shipyard Engineering	
Smegvic T-3	Hull Outfitting Works for Smedvig T-3	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	Jan 05 - Mar 05	Malaysia Shipyard Engineering	
KR2 Turnaround	Shutdown KR2 Kerteh with Mushtari Maintenance	Refinery	Kerteh, Terengganu	Apr 05 - May 05	Mushtari Maintenance	

CLIENT	SCOPE	DIVISION	LOCATION	YEAR	MAIN CONTRACTOR	HOST / OWNER
FPSO Kikeh - Refurbishment and Marine Conversion	Fabrication, Installation and Testing of Marine Piping Systems at Main Deck, Cargo Tank, Pump Room and Fwd Pump Room	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	Jan 05 - May 08	Malaysia Shipyard Engineering	Malaysia Deepwater Floating Terminal (MDFT)
KIKEH DTU Truss Spar	Fabrication & Installation of Structural Steel Works for KIKEH DTU Truss Spar - Jacket	Heavy Engineering Offshore	MSE Pasir Gudang, Johor	Jul 05 - Sep 06	Malaysia Shipyard Engineering	Technip Production (M)
Petlin Turnaround 2006	Shutdown PETLIN, Kerteh Turn Around 2006	Refinery	Kerteh, Terengganu	Feb 06 - Jun 06	Mushtari Maintenance	
FSO Cendor	Hull Outfitting Works for FSO Cendor Conversion	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	Feb 06 - Sep 06	Malaysia Shipyard Engineering	MISC Berhad
FSO Abu Cluster	Hull Outfitting Works for FSO Abu Cluster	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	Feb 06 - Nov 06	Malaysia Shipyard Engineering	MISC Berhad
MTBE, Turnaround	MTBE Shutdown Maintenance Works	Shipbuilding / Conversion	Gebeng, Pahang	Mar 06 - Jun 06	Mushtari Maintenance	
Titan Butadene & Proplyne Project	Piping Fabrication & Installation Works & Commissioning Assistance	Refinery	Pasir Gudang, Johor	Aug 06 - Jan 10	CTCI Engineering & Construction	Titan Chemical
FPSO Ruby Princess	Hull Outfitting Works for FPSO Ruby Princess	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	Dec 07 - Feb 10	Malaysia Shipyard Engineering	MISC Berhad
Self-Erecting Drilling Tender Barge	Fabrication, Installation and Testing of Process & Utility Piping and Hull Structure Construction for T10, T11 and T12	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	Oct 07 - May 10	Malaysia Marine & Heavy Engineering Sdn Bhd	Seadrill Asia Pte. Ltd.
FPSO Ruby - Marine Conversion and Topside Piping Works	Refurbishment / Marine Conversion and Topside Fabrication, Installation and Testing of Hull / Vessel Piping Systems Fabrication, Installation and Testing of Topside Piping	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	May 07 - Dec 07	Malaysia Marine & Heavy Engineering Sdn Bhd	MISC Berhad/ Petrovietnam Technical Services
FSO Orkid	Hull Outfitting Works for FSO Orkid	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	Jan 08 - Sep 08	Malaysia Shipyard Engineering	MISC Berhad
AnDP - D Platform	Structural Works for AnDP - D Platform (Angsi A Ph IV Development Project)	Heavy Engineering Offshore	MSE Pasir Gudang, Johor	Jan 08 - Dec 09	Malaysia Shipyard Engineering	Petronas
В11К-А	Fabrication, loadout and Seafastening Works of B11K-A Structural	Heavy Engineering Offshore	MSE Pasir Gudang, Johor	Apr 08 - Sep 09	Malaysia Shipyard Engineering	Shell
T12 Self Erecting Tender Barge	Installation of Equipment for Cementing Unit	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	May 08 - Jun 08	Dowell Schlumberger International Inc (Panama)	Seadrill Asia Pte. Ltd.
WD Kent, Seahawk and Searex IX	Installation of Structure Foundation, Piping Equipment Supports for Cementing Unit	Shipbuilding / Conversion	MSE Pasir Gudang, Johor	May 08 - Dec 08	BJ Services Company (Singapore) Pte Ltd	Marlin Offshore
Gumusut Kakap Semi FPS	Fabrication and Installation of Structural Columns and Pontoon/ Fabrication, Installation and Testing of Hull Piping Systems Fabrication and Installation	Heavy Engineering Offshore	MSE Pasir Gudang, Johor	Jan 09 - Jun 12	Malaysia Shipyard Engineering	Sabah Shell Petroleum Co. Ltd. / MISC
LPG Cefalu	Hull Fitting Works for LPG Cefalu	Marine Repair	MMHE Pasir Gudang, Johor	Sep 11 - Oct 11	Malaysia Marine & Heavy Engineering Sdn Bhd	
Bunga Kemboja	Main Exhaust Pipe at Funnel Area for Bunga Kemboja	Marine Repair	MMHE Pasir Gudang, Johor	Oct 11 - Oct 11	Malaysia Marine & Heavy Engineering Sdn Bhd	
MOPU Ocean Legend	Structural Steel Renewal of Mat Tank - MOPU Ocean Legend (Jack Up Rig)	Shipbuilding/ Conversion	MSE Pasir Gudang, Johor	Oct 11 - Dec 11	Malaysia Marine & Heavy Engineering Sdn Bhd	
FPSO Cendor Phase 2	Fabrication, Installation and Testing of Hull/ Vessel Piping Systems in Cargo Tanks, Ballast Tanks, Pump Room, Fwd Pump Room and Main Deck	Shipbuilding/ Conversion	MSE Pasir Gudang, Johor	Dec 11 - May 14	Malaysia Marine & Heavy Engineering Sdn Bhd	MISC Berhad/ Petrofac (M) Sdn Bhd
	Fabrication, Installation and Testing of Topshide Piping System					

25 <u>26 </u>

CLIENT	SCOPE	DIVISION	LOCATION	YEAR	MAIN CONTRACTOR	HOST / OWNER
FPSO Cendor Phase 2	FPSO Cendor Project - Fabrication & Installation of Helideck Structure	Shipbuilding/ Conversion	MSE Pasir Gudang, Johor	Dec 11 - May 14	Malaysia Marine & Heavy Engineering Sdn Bhd	MISC Berhad/ Petrofac (M) Sdn Bhd
	FPSO Cendor Project - Miscelleneous Hull Outfitting Works					
FPSO Tullow	Fabrication and Installation of Structural & Piping Works - PAR (Preassemble Rack)	Heavy Engineering Offshore	Gelang Patah, Johor	May 13 - Mar 14	MODEC / Dynamac Engineering Pte. Ltd.	Tullow Ghana Limited
Energy Producer 6	Fabrication & Installation of Generator & VFD Platform Structure	Shipbuilding/ Conversion	MMHE Pasir Gudang, Johor	Feb 14 - Nov 14	Rig Master Pte. Ltd.	Coastal Energy/ MOPU Holdings (Singapore) Pte. Ltd.
Energy Producer 7	Fabrication & Installation of Generator & VFD Platform Structure	Shipbuilding/ Conversion	MMHE Pasir Gudang, Johor	Dec 14 - May 15	Rig Master Pte. Ltd.	Coastal Energy/ MOPU Holdings (Singapore) Pte. Ltd.
Malikai TLP Project	Fabrication and Installation of Structural Columns and Pontoon	Heavy Engineering Offshore	MMHE Pasir Gudang, Johor	Mar 15 - Jan 16	Malaysia Marine & Heavy Engineering Sdn Bhd	Sabah Shell Petroleum Co. Ltd./ MISC
Besar - A WHP Topside	Topside Piping & Structural Works	Heavy Engineering Offshore	MMHE Pasir Gudang, Johor	Jan 15 - Mar 16	Malaysia Marine & Heavy Engineering Sdn Bhd	Petronas Carigali
North Malay Basin Bergading	Structural Works for Turret Support Block	Shipbuilding/ Conversion	MMHE Pasir Gudang, Johor	Oct 15 - Mar 16	Malaysia Marine & Heavy Engineering Sdn Bhd	SOFEC/ Carigali HESS
PFLNG Turret	Turret - Structural & Piping Works	Heavy Engineering Offshore	MMHE Pasir Gudang, Johor	Oct 16 - June 17	Malaysia Marine & Heavy Engineering Sdn Bhd	SOFEC/ Petronas Carigali
Petronas Rapid Package 3 Area 2	Piping Fabrication Works	Refinery	MMHE Pasir Gudang, Johor	Jun 16 - Dec 16	Malaysia Marine & Heavy Engineering Sdn Bhd	Technicas Reunidas
Petronas Rapid - Punj Llyod	Fabrication of Tank Secondary & Outfittings Structure	Refinery	MMHE Pasir Gudang, Johor	Apr 16 - Apr 17	Malaysia Marine & Heavy Engineering Sdn Bhd	Punj Llyod
Dan Gote Calm Buoy Project	Structural, Piping and Mechanical Works	Heavy Engineering Offshore	MMHE Pasir Gudang, Johor	Nov 16 - Feb 18	Malaysia Marine & Heavy Engineering Sdn Bhd	SOFEC Inc
Malakoff Prai Power Plant - Major Outage Aug 2017	Auxiliary Boiler Repair & Maintenance Works	Power Generation	Prai, Penang	Nov 16 - Oct 17	HFS - GE Power System Korea	Malakoff Power Berhad
(HRSG)	Engineering, Procurement and Construction of HPHTSH Semi Harps Replacement					
Panglima Power Major Outage Oct 2017 (HRSG)	Engineering, Procurement and Construction of HRSG Flow Corrective Device (Modification to improve HRSG Inlet Flow Profile)	Power Generation	Telok Gong, Melaka	Jan 17 - Nov 17	HFS - GE Power System Korea	Edra Energy
	Conditions Assessment of Complete HRSG & BOP Piping Hanger Supports & Replacement Works					
	Upgrading & Supply of HP Desuperheater Valve (Final Stage) & Desuperheater Pipe Spool (P91 Material)					
YLT Power Seraya - Cogen 30 & 40 Major Outage Jan 18 & July 18	Engineering, Procurement & Construction of Condenstae Preheater (EC-PR3) Harp Replacement Works	Power Generation	Jurong Island, Singapore	Feb 17 - Aug 18	HFS - GE Power System Korea	YTL Corporation
	Engineering, Procurement & Construction of HP Economizer Tube Replacement Works					
4047 Layang Project	Supply of I-Tube Extention Piece	Subsea	Seagull Marine Pte. Ltd., Singapore	Feb 17 - Mar 17	Asiaflex Products Sdn Bhd	Asiaflex Produc
EPCIC Project D35R-A to D35JT-C	Provision of I-Tube, I Tube Clamp and Riser Guard Fabrication	Subsea	Seagull Marine Pte. Ltd., Singapore	Jun 18 - Oct 18	Technip Marine (M) Sdn Bhd	Roc Oil (Sarawa Sdn Bhd

CLIENT	SCOPE	DIVISION	LOCATION	YEAR	MAIN CONTRACTOR	HOST / OWNER
ROC Oil D35 Pipeline EPCIC Project	Provision of Fabrication Services for Variaton No. 001 Fabrication of I-Tube, topside clamps, subsea clamps, winch base, fairlead grillage & pad eyes for D18 Phase 2 & D28 Project	Subsea	Seagull Marine Pte. Ltd., Singapore	Jun 18 - Jan 19	Technip Marine (M) Sdn Bhd	Petronas Carigali Sdn Bhd
76477 D18-D28 Project	Supply of I-Tube Centralizer	Subsea	Seagull Marine Pte. Ltd., Singapore	Jul 18 - Oct 18	Asiaflex Products Sdn Bhd	Asiaflex Products Sdn Bhd
Bokor Phase 3 Redevelopment Project	Fabrication of Winch Base Grillage & Fairlead Grillage for WHP	Subsea	Seagull Marine Pte. Ltd., Singapore	Nov 18 - Sept 19	Technip Marine (M) Sdn Bhd	Petronas Carigali Sdn Bhd
Gemusut Kakap PH2 Project	Goosenech Handling Frames & Safety Clamp Inserts	Subsea	Seagull Marine Pte. Ltd., Singapore	Feb 19 - Aug 19	Technip Marine (M) Sdn Bhd	Technip Marine (M) Sdn Bhd
Marine Repair Works	Structural & Piping Works for:  LPG RUBRA, UMW NAGA5 SMILEY LADY, LNG PUTER! ZAMRUD, CONSORT JUSTICE LNG WOODSIDE DONALDSON, X-PRESS GANGES, LNG GASELYS, LNG SERI ANGGUN, SEMUA GEMBIRA, LNG PORTOVENERE, ICON LUTUS, ICON SOPHIA, OCEAN FRIEND	Marine Repair	MMHE West Yard, Pasir Gudang, Johor	Mar 10 - Oct 19	Malaysia Marine & Heavy Engineering Sdn Bhd	
FSO Sao Vang - External Turret	Fabrication and Erection of Multidicipline Works; Sructural, Piping and Mechanical	Heavy Engineering Offshore	MMHE Pasir Gudang, Johor	May 19 - Mar 20	Malaysia Marine & Heavy Engineering Sdn Bhd	Promor Pte.Ltd./ Malaysia Vietnam Offshore Termina (MVOT)
FSO Sao Vang - Vessel RLE & Conversion	Repair Life Extension (RLE) & Coversion of Structural & Piping Works, Forepeak Modification and Turret Integration Works	Shipbuilding/ Conversion	MMHE Pasir Gudang, Johor	May 19 - Mar 20	Malaysia Marine & Heavy Engineering Sdn Bhd	Malaysia Vietnam Offshore Termina (MVOT)
Bekok A & B Project	Structural, Piping & Mechanical (Multidicipline Package) og 2nos of WHP Topside, Jacket and Bridge	Heavy Engineering Offshore	MMHE Pasir Gudang, Johor	Jan 20 - Oct 20	Malaysia Marine & Heavy Engineering Sdn Bhd	Petronas Carigali
CPP KASAWARI	Piping for CPP Kasawari Project	Heavy Engineering Offshore	MMHE Pasir Gudang, Johor	Jun 21 - Aug 23	Malaysia Marine & Heavy Engineering Sdn Bhd	Petronas Carigali
Rosmari Marjoram - Topside	Structural Topside for Rosmari Marjoram project	Heavy Engineering Offshore	MMHE Pasir Gudang, Johor	Nov 22 - Sept 24	Malaysia Marine & Heavy Engineering Sdn Bhd	Shell
FPSO Bunga Kertas	Steel Works (320 Tonnes)	Heavy Engineering Offshore	MMHE Pasir Gudang, Johor	Jan 24- Jan 25	Malaysia Marine & Heavy Engineering Sdn Bhd	
CPOC Topside & Jacket - Carigali PTTEPI	Strutural & Piping Works for 5 Unit of Topside & Jacket Structur	Heavy Engineering Offshore	MMHE Pasir Gudang, Johor	Oct 23 - Jun 25	Malaysia Marine & Heavy Engineering Sdn Bhd	Carigali-PTTEPI Operating Company Sdn Bh
Grillage Fabrication Work	Fabrication of Pile and Conductor grillage and Fabrication of Top Side Grillage and Boat Landing Grillage		TLP Pasir Gudang, Johor	Jul 24 - Aug 24	Seagull Marine Offshore (M) Sdn Bhd	Technip
Griffin	Fabrication Work of HLV Grillage and Sea Fastening & Guides and bumpers		TLP Pasir Gudang, Johor	Sept 24 - Oct 24	Seagull Marine Offshore (M) Sdn Bhd	Technip
Gantry Crane	25 Ton Gantry Crane FabricationI Cost		TLP Pasir Gudang, Johor	Feb 25 - Mar 25	Seagull Marine Offshore (M) Sdn Bhd	Technip
LBL Frames	Fabrication of LBL Frames		TLP Pasir Gudang, Johor	Jun 25 - Aug 25	Seagull Marine Offshore (M) Sdn Bhd	Technip
Tennet	Pre-Fabrication, Fabrication And Installation Of Subpanel For Topsides of EPC Works For Tennet Offshore 2gw Project (Ijmuiden Ver Alpha)	Heavy Engineering Offshore	MMHE Pasir Gudang, Johor	Jul 25 - Present	Malaysia Marine & Heavy Engineering Sdn Bhd	Petrofac International (UAE) LLC

 $^{27}$