



MHB CORPORATE OVERVIEW





MHB CORPORATE STRUCTURE



MHB Corporate Structure



PETRONAS



51.00%
PETRONAS' shareholding in MISC Berhad (direct interest)

66.50%
MISC's shareholding in MHB (direct interest)



MALAYSIA MARINE AND HEAVY ENGINEERING HOLDINGS BERHAD
Investment Holding

- **Subsidiary**
- **Jointly Controlled Entity**

Note: PETRONAS' shareholding in MHB through MISC Berhad (indirect interest) is 33.92%



MMHE INTERNATIONAL SDN BHD
Chemical cleaning of ship tanks, boilers, cylinder covers and various ship equipment and machinery (dormant)



MALAYSIA MARINE AND HEAVY ENGINEERING SDN BHD
Provision of oil and gas engineering and construction works, marine conversion and repair services



TECHNIP MHB HULL ENGINEERING SDN BHD
Build and develop hull engineering and engineering project management capacities (dormant)



MALAYSIA MARINE AND HEAVY ENGINEERING SAUDI LIMITED
Provision of engineering, procurement, construction, installation and commissioning services for offshore and onshore facilities



TECHNO INDAH SDN BHD
Sludge disposal management (dormant)



MMHE LNG SDN BHD
Provision of repair services and dry docking of liquefied natural gas vessels (dormant)



MHS INTEGRATED ENGINEERING SDN BHD
Plant turnaround and shutdown maintenance



MMHE EPIC MARINE & SERVICES SDN BHD
Provision of repair services and dry docking of marine vessels at the ship repair facilities located in Kemaman, Terengganu (dormant)



MMHE-TPGM SDN BHD
Provision of engineering, procurement, construction, installation and commissioning services (dormant)



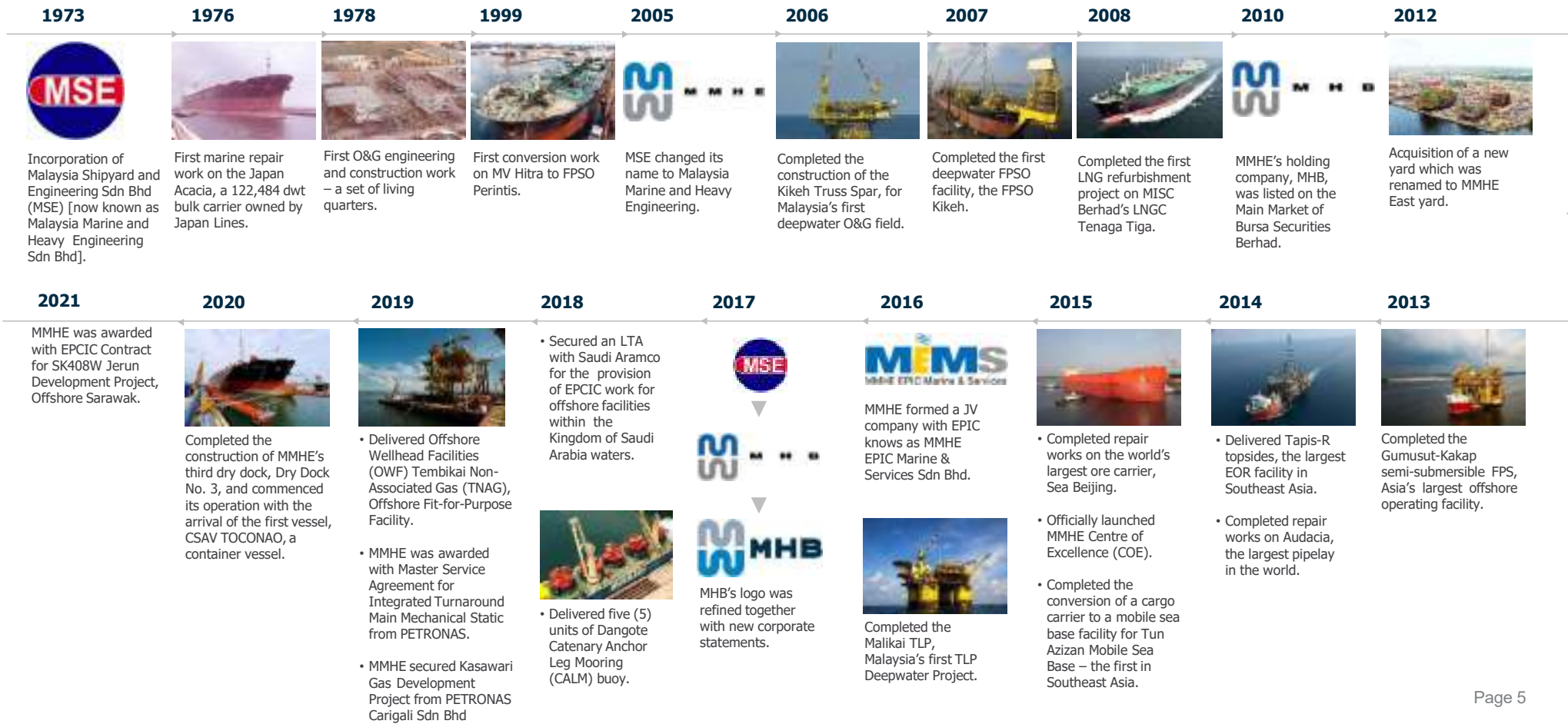
MMHE-ATB SDN BHD
Manufacturing of pressure vessels and tube heat exchangers (dormant)



MHB CORPORATE MILESTONES



MHB Corporate Milestones





WHO WE ARE AND WHAT WE DO



Who We Are and What We Do

Malaysia Marine And Heavy Engineering Holdings Berhad (MHB) is a Globally Trusted, Energy and Marine Solutions Provider, for a Wide Range of Heavy Engineering Facilities and Vessels.



Incorporated in **1973**



Listed on the Main Market Bursa Malaysia Securities Berhad in **2010**



2,523 diverse & skilled workforce nationwide
(as at 1 April 2021)



22,797,009 safe manhours without Lost Time Injury (LTI)
(as of 25 May 2021)



We operate **MMHE Centre of Excellence**, a learning centre dedicated for oil & gas and marine industries
50,000 trainees have accomplished their courses here

Highest level in **Quality, Health, Safety & Environment Culture**

- ISO 45001: 2018 Certified Occupational Health & Safety Management System
- ISO 14001: 2015 Certified Environmental Management System
- ISO 9001: 2015 Certified Quality Management System
- ISO 3834 – 2: 2005 Certified Quality Requirements for Fusion Welding of Metallic Material
- EN1090 – 1: 2009 + A1: 2011 Certified Execution of Steel Structures and Aluminium Structures
- ISO 29001: 2020 Certified Petroleum, Petrochemical and Natural Gas Industry

We adhere to the highest standard of **Integrity**

- ISO 37001: 2016 Certified Anti-Bribery Management System



Who We Are and What We Do



Over 40 years of delivering integrated and complex solutions for oil & gas and marine industries



Proven expertise in full range EPCIC services with the **delivery of over 200 offshore facilities, among others:**

- 54 Wellhead Platform (WHP) Topsides
- 14 Central Processing Platform (CPP) Topsides
- 24 Turrets
- 61 Jackets
- 15 Floaters
- 3 Semi-Submersible
- 1 Tension Leg Platform (TLP)
- 1 Spar



Delivered more than **3,800 marine solutions** with comprehensive marine services for all types of vessels and rigs (repair, refurbishment, etc) in one location.

Dry dock capacities:

- Dry Dock No. 1 Capacity: 450,000 dwt
- Dry Dock No. 2 Capacity: 140,000 dwt
- Dry Dock No. 3 Capacity: 400,000 dwt



Complete conversion facilities in one location with a track record of **more than 30 conversion projects**



OUR LOCATION AND CLIENTS

OUR STRATEGIC LOCATION



- North America
- South America
- Africa
- Europe
- Asia
- Australia



Well-Positioned along one of the busiest shipping lanes of the South East Asia.

Thriving in the heart of the heavy industrial area of **Pasir Gudang, Johor, Malaysia.**

Supported by **well-developed commercial infrastructures.**

Easily Accessible from Singapore's main business districts and industrial estates.

Free Logistic Service from Singapore's bonded warehouse to MMHE (2 trips per day).



- 0.2 km**
Access to highways
- 5-15 km**
Access to five star hotels
- 30 km**
From Singapore Causeway
- 40 km**
From Senai International Airport
- 50 km**
From MMHE Singapore Transit Warehouse

OUR CLIENTS

AET Shipmanagement (M) Sdn Bhd
 AET Shipmanagement (S) Pte Ltd
 Anglo Eastern Ship Management
 Apex Ship Management Pte Ltd
 ASP Procurement Services
 Ascot Ship Management Sdn Bhd
 Brunei Shell Petroleum Sdn Bhd
 Bumi Kemudi Navigation Sdn Bhd
 BW Fleet Management AS
 C. & M. Decker Reijnders Sdn Bhd
 Cargill-PTTSTI Operating Company
 Ceresian Offshore Sdn Bhd
 Chen Construction (M) Sdn Bhd
 Chevron Offshore (Thailand) Ltd
 China MO Shipping Co Ltd
 Columbia Shipmanagement Pte Ltd
 Cosco Pte Ltd
 Eagle Shipmanagement Pte Ltd
 Eaglestar Shipmanagement (S) Pte Ltd
 Eastern Pacific Shipping Pte Ltd
 EPC Ship Management Pte Ltd
 Emaar Shipmanagement BV
 Euronav
 Euronav Exploration and Production Malaysia Inc
 First Ship Management Pte Ltd
 FMC Sdn Bhd
 FMC Technologies

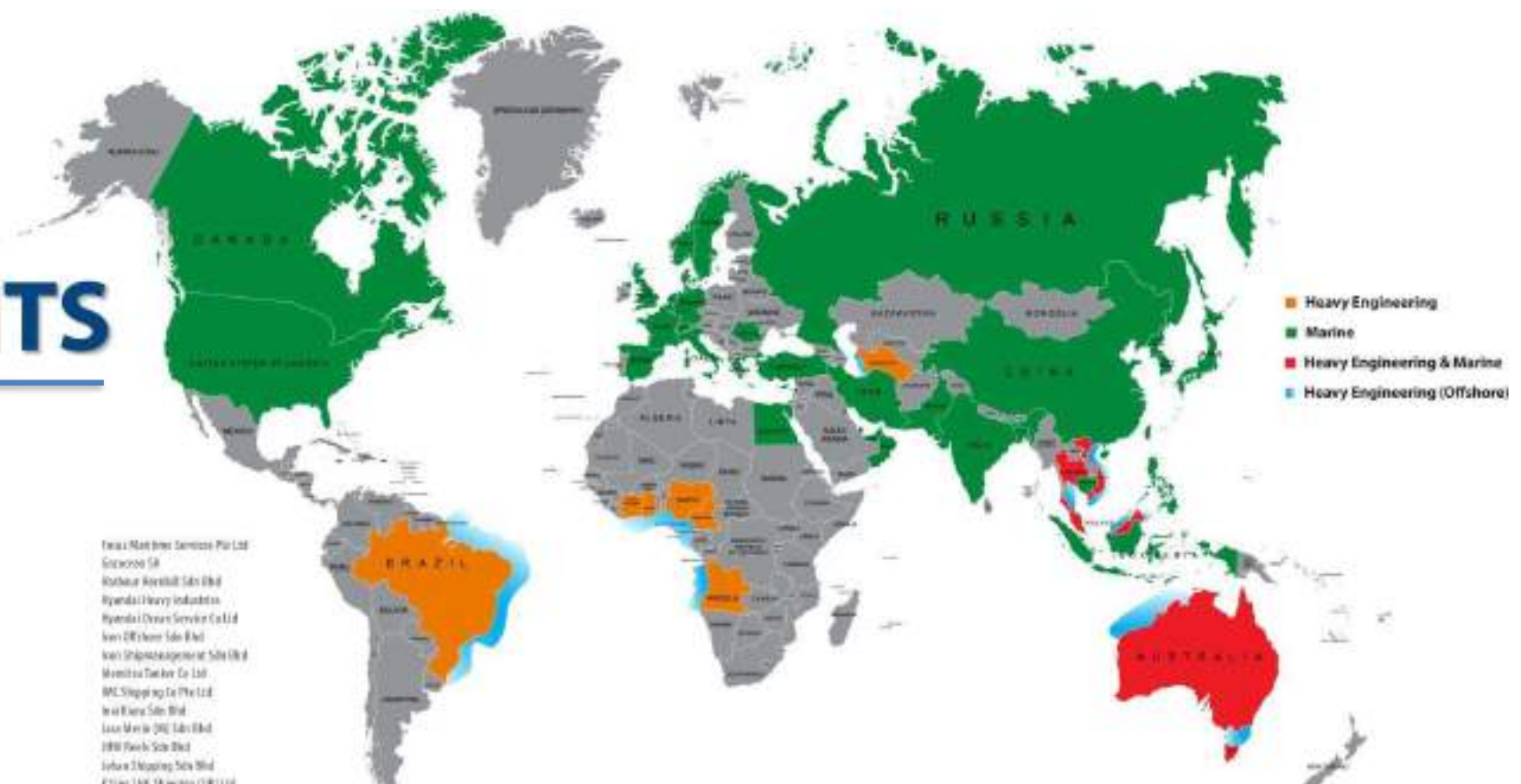
Enka Maritime Services Pte Ltd
 Enxoro SA
 Eschaur Aresbild Sdn Bhd
 Hyundai Heavy Industries
 Hyundai Ocean Service Co Ltd
 Ikon Offshore Sdn Bhd
 Ikon Shipmanagement Sdn Bhd
 Mersinva Tanker Co Ltd
 MSC Shipping Co Pte Ltd
 Ikon Kona Sdn Bhd
 Ikon Merak (M) Sdn Bhd
 Ikon Pireo Sdn Bhd
 Ikon Shipping Sdn Bhd
 KILWA LNG Shipping (S) Ltd
 Kolombangara Petroleum Operating Company
 Cotacora Maritime Sdn Bhd
 Graham OGS Shipping AS
 KOS Line Ltd
 Lufkin Communications (Malaysia) Sdn Bhd
 Layan Offshore Sdn Bhd
 M.M. Shipping (S) Pte Ltd
 M-W Group
 Malacca Towage & Tugboat Sdn Bhd
 Malaysia Maritime Offshore Terminal (S) Limited
 Malaysia Maritime Enforcement Agency
 Marine Offshore (S) Pte Ltd
 MSC Berhad

Mitsui OSE Lines Ltd
 MOL LNG Transport (Europe) Ltd
 MOL Shipmanagement Asia Pte Ltd
 MVL Ship Management Pte Ltd
 AEC Engineering Sdn Bhd
 NCT Shipping Sdn Bhd
 Naphtho B.V. Corp
 Neptune Shipmanagement Services
 Nippon Oil Exploration (M) Ltd
 NYE Shipmanagement
 Odebrecht
 Odebrecht
 OGC Ship Manager Pte Ltd
 Osaki Carbon Ltd

Petros Resources Sdn Bhd
 Petrofac E & C Sdn Bhd
 PETROBRAS
 Petrofac Asia Engineering Consultancy JSC
 PMA International Services
 PPEC Offshore & Facilities Sdn Bhd
 Peng Cheng Sdn Bhd
 Royal Wafcon Heavy
 Sabah Shell Petroleum Company
 Sapura
 Sapura Engineering (Offshore) Sdn Bhd
 Sapsa Services
 Sasolink Shell Berhad

SIBUR
 SIBUR-Marine Inc
 SLY Management Services (Japan) Ltd
 Sna Consortium Pte Ltd
 Soudan Offshore Singapore Pte Ltd
 Southern Management Pte Ltd
 Shell
 SK Shipping Co Ltd
 Spherul
 Tokoro (M) Shipping Sdn Bhd
 TMS Offshore Singapore Pte Ltd
 Tokoro Malaysia Ltd
 Turner Pacific Management (S) Pte Ltd

Tishman
 Trossen Resources
 Torkay Marine Services
 Torkay Shipping Group Ltd
 Torex Shipmanagement
 Total Ship Management Sdn Bhd
 Topy Engineering Corporation
 T. Sipsa (M) Pte Ltd
 Vanguard Shipmanagement Pte Ltd
 W. Balkrishn Shipmanagement
 Wafcon Energy Limited
 World Tankers Management Pte Ltd
 Wafcon Engineering Services Sdn Bhd



- Heavy Engineering
- Marine
- Heavy Engineering & Marine
- Heavy Engineering (Offshore)



MHB FACILITIES



Malaysia's Largest Fabrication Yard by Area and Annual Production Capacity



MMHE West

379.82 acres

(Area: 1,537,090m²)



MMHE East

115.76 acres

(Area: 468,450m²)



MMHE West yard, Pasir Gudang, Johor, Malaysia

153.7 hectares (379.82 acres)



MMHE East yard, Pasir Gudang, Johor, Malaysia
46.8 hectares (115.76 acres)



Our Facilities



The Largest Single Fabrication Yard

in Southeast Asia

[Area: 2,005,540m²
Annual Production Capacity:
129,700 MT]



One of the Largest Dry Docks

in Southeast Asia

[With maximum capacity of
handling vessels up to 450,000
dwt]



The Largest Goliath Cranes

in Southeast Asia

[2 x 600T x 150m(W) x 100m(H)]



One of the Largest Synchrolifts

in the world

[Lifting Capacity: 13,500 tonnes
Maximum Vessel Size:
165m (L) x 31m (W)]



Main Fabrication Facilities



Fabrication area



Goliath cranes

Facilities		Information & Dimension	
Annual Fabrication Capacity	129,700 MT		
Workshops/Storage <i>(refer to next slide)</i>	<ul style="list-style-type: none"> ▪ Automated Cutting & Assembly Workshop ▪ Centralised Piping Workshop ▪ Exotic Piping Workshop ▪ Auto-Blast & Primer Workshop ▪ Centralised Chemical Cleaning Workshop 	<ul style="list-style-type: none"> ▪ Structures Fabrication Workshop ▪ Blasting & Painting Workshop ▪ Marine Repair Workshop ▪ Shiplift Workshop ▪ Pressure Vessel Fabrication Workshop ▪ Centralised Scheduled Waste Storage ▪ Centralised Warehouse 	
Skid Tracks & Bulkheads	<u>MMHE West</u> 55,000 MT 40,000 MT 12,000 MT 2 x 5,000 MT	<u>MMHE East</u> 25,000 MT 2 x 15,000 MT 5,000 MT	
Cranes	4 x 250T Crawler Cranes 9 x 50T Rough Terrain Cranes 9 x Luffing Cranes (Up to 80 MT) 2 x 600T x 150m x 100m-H Goliath Cranes 1 x 25T Truck Crane		



Workshop Facilities - West



Automated Cutting & Assembly Workshop



Blasting & Painting Workshop

Facilities	Total Area	Dimension (W x L x H)	Monthly Capacity
Auto-Blast & Primer Workshop	4,160 m ²	16m(W) x 136m(L) x 11m(H) x 2 Bay	Blast & Paint 27,500 m ² / Month
Automated Cutting & Assembly Workshop	37,200 m ²	93m(W) x 400m(L) x 15m-42m(H)	Structural 5,000 MT / Month
Structures Fabrication Workshop	5,600 m ²	20m(W) x 96m(L) x 18m(H) x 3 Bay	Structural 750 MT / Month
Marine Repair Workshop	14,470 m ²	27m(W) x 150m(L) x 12.5m(H) x 4 Bay	Structural 2,400 MT / Month
Shiplift Workshop	7,660 m ²	22m(W) x 87m(L) x 12m(H) x 4 Bay	Structural 1,200 MT / Month
Pressure Vessel Fabrication Workshop	8,358 m ²	30m(W) x 100m(L) x 23m(H) + 23.5m (W) x 228m x 11m(H)	Structural 1,500 MT / Month
Centralised Piping Workshop	8,460 m ²	20m(W) x 75-95m(L) x 9m(H) x 5 Bay	Piping 27,000 Dia-Inch / Month
Exotic Piping Workshop	3,675 m ²	21m(W) x 88m(L) x 10m(H) x 2 Bay	Piping 11,000 Dia-Inch / Month
Centralised Warehouse / Piping Workshop	15,200 m ²	40m(W) x 66-86m(L) x 19m(H) x 5 Bay	Piping 59,800 Dia-Inch / Month
Blasting & Painting Workshop	10,400 m ²	80m(W) x 130m(L) x 12m-20m(H)	Blast & Paint 32,700 m ² / Month
Centralised Chemical Cleaning Workshop	1,330 m ²	19m(W) x 70m(L) x 12.5m(H)	Waste Water Treatment – 183 m ³ / Month
Centralised Scheduled Waste Storage	1,100 m ²	20m(W) x 55m(L) x 6m(H)	Storage Capacity – 5,000 MT Waste



Workshop Facilities - East



Facilities	Total Area	Dimension (W x L x H)	Monthly Capacity
Auto-Blast & Primer Workshop - Land A	1,235 m ²	19m(W) x 65m(L) x 8m(H)	Blast & Paint 9,000 m ² / Month
Auto-Blast & Primer Workshop - Land D	1,235 m ²	20m(W) x 60m(L) x 8m(H) x 2 Bay	Blast & Paint 18,000 m ² / Month
Structures Fabrication Workshop - Land B	3,636 m ²	36m(W) x 101m(L) x 13m(H)	Structural 500 MT / Month
Structures Fabrication Workshop - Land C	3,150 m ²	35m(W) x 90m(L) x 13m(H)	Structural 400 MT / Month
Blasting & Painting Workshop - Land D	1,750 m ²	25m(W) x 70m(L) x 8.5m(H) x 2Bay	Blast & Paint 5,000 m ² / Month
Mechanical & Electrical Workshop - Land B	1,200 m ²	15m(W) x 80m(L) x 4m(H) x 4 Bay	Mechanical & Electrical Works
Commissioning Workshop - Land A	490 m ²	10m(W) x 49m(L) x 7.5m(H) x 4 Bay	Testing & Commissioning Works
Warehouse - Land C	3,256 m ²	37m(W) x 88m(L) x 7.5m(H)	Material Storage



Marine Repair Facilities



Dry docks 1 & 2



Dry docks 1, 2 & 3



Land berths 1 & 2

Facilities	Information & Dimension	
Dry dock 1	385m x 80m x 14m	Capacity: 450,000 dwt
Dry dock 2	270m x 46m x 12.5m	Capacity: 140,000 dwt
Dry dock 3	350m x 80m x 14m	Capacity: 400,000 dwt
Land berth 1	345m	Capacity: 142 tonnes/m
Land berth 2	345m	Capacity: 125 tonnes/m
Shiplift – One of the largest in the world	188m x 33.8m x 8m	Capacity: 50,000 dwt
6 Quays / Berths	Up to 1,889m in length	7m draft average
Finger Pier	300m (L) x 25m (W)	390,000 dwt
LNGC Repair Facilities	<ul style="list-style-type: none"> ▪ Cryogenic workshop (770 m² area) ▪ Invar welding centre ▪ Global test control rooms ▪ Acoustic and helium testing equipment ▪ Mobile cargo tanks monitoring instruments console ▪ 16-yard level-luffing cranes (up to 80 tonnes) ▪ 6 crawler cranes (up to 450 tonnes) 	
Floating Dock (Kemaman Supply Base)	116m x 24m x 9m	Capacity: 6,500 MT



MMHE EPIC Marine & Services (MEMS)

Kemaman Supply Base (KSB), Kemaman, Terengganu, Malaysia

Dry docking, repair, refurbishment, maintenance & technical services

Floating dock lifting capacity: 6,500 MT



Services





Services: Offshore



Gumusut-Kakap Semi-Submersible Floating Production System (FPS)



**Asia's Largest Offshore
Deepwater Operating Facility**

Engineering, Procurement and Construction

Client:

Sabah Shell Petroleum Company

Total Weight: 39,000 MT

Topside: 20,000 MT

Hull: 19,000 MT

Location:

Offshore Sabah, East Malaysia

Date of Completion:

11 June 2012



Malikai Tension Leg Platform (TLP)



Malaysia's First TLP Project

*Engineering, Procurement, Construction,
Pre-Commissioning, Testing, Loadout and
Seafastening*

Client:

Sabah Shell Petroleum Company

Total Weight: 27,500 MT

Topside: 14,000 MT

Hull: 13,500 MT

Location:

Offshore Sabah, East Malaysia

Date of Completion:

July 2016



Kikeh Truss Spar



Asia's First Deepwater Truss Spar

Client:

Murphy Sabah Oil Company

Total Weight: 17,030 MT

Topside: 3,796 MT

Hull: 13,243 MT

Location:

Offshore Sabah, East Malaysia

Date of Completion:

10 June 2006



Tapis-R Topside for Enhanced Oil Recovery (EOR) Project



*Front End Engineering Design (FEED),
Engineering, Procurement, Construction,
Installation and Commissioning*

Client:

PETRONAS Carigali Sdn Bhd

Weight:

Tapis-R Topside:
18,000 MT

Tapis-Q Topside:
2,300 MT

Location:

Offshore Sarawak, Malaysia

Date of Completion:

30 August 2013



*Front End Engineering Design (FEED),
Engineering, Procurement, Construction,
Installation and Commissioning*

Client:

PETRONAS Carigali Sdn Bhd

Weight:

CPP Weight:

Topside: 12,688 MT
Jacket: 9,480 MT
Piles: 5,258 MT

WHP Weight:

Topside: 1,821 MT
Jacket: 2,418 MT
Piles: 1,761 MT
Bridge: 469 MT

Location:

Offshore Terengganu, Malaysia

Date of Completion:

June 2015



Tembikai Non-Associated Gas



Offshore Fit-for-Purpose Facility

*Engineering, Procurement, Construction,
Installation and Commissioning*

Client:

Vestigo Petroleum Sdn Bhd

Weight:

1,900 MT

Location:

Offshore Terengganu, Malaysia

Date of Completion:

8 July 2019



Services: Onshore



4 Modules Pyrolysis Furnace



Client:
AGRA Birwelco ExxonMobil

Quantity:
2,000 MT x 4 modules

Location:
Singapore

Date of Completion:
November 1999



RAPID Package 14



Client:

OUI JV (A Consortium of Fluor Daniel International (Malaysia) Sdn Bhd and Technip Geoproduction (M) Sdn Bhd)

Quantity:

9,877 MT

270,000 dia-inch

Location:

Pengerang Johor, Malaysia

Date of Completion:

10 May 2019



RAPID Package 5



Client:

Toyo Engineering Corporation

Quantity:

11,739 MT

855,554 dia-inch

Location:

Pengerang Johor, Malaysia

Date of Completion:

5 January 2018



Services: Conversion



FPSO Cendor



Conversion of a tanker to an FPSO

Client:

MISC Berhad

Weight:

Topside: 6,590 MT

Location:

Offshore Terengganu, Peninsular Malaysia

Production Capacity:

150,000 bopd

Date of Completion:

28 September 2013



FPSO Kikeh



Conversion of a tanker to an FPSO for Malaysia's first deepwater field

Client:

MISC Berhad / SBM

Weight:

Topside: 8,434 MT

Location:

Offshore Sabah, East Malaysia

Production Capacity:

120,000 bopd

Date of Completion:

4 January 2007



FSU Lekas



Rejuvenation, Life Extension & Conversion (RLEC) of an LNG vessel to an FSU

Client:

MISC Berhad

Location:

Melaka, Malaysia

Gross Tonnage:

80,510 dwt

Date of Completion:

31 May 2012



Conversion of MODU to MOPU

Client:
CEPSA

Drilling Depth:
30,000 ft

Date of Completion:
3 July 2015



Services: Marine Repair & Refurbishment



LNGC Hyundai Aquapia



Dry docking and repair

Client:

Hyundai Ocean Service Co Ltd

Weight:

77,564 dwt

Date of Completion:

20 July 2017



Ore Carrier Sea Beijing



Dry docking and repair of the Largest Ore Carrier in the world

Client:

STX Marine

Weight:

403,818 dwt

Date of Completion:

4 September 2016



Pipelay Vessel Audacia



Repair & other services of the Largest Pipelay Vessel in the world

Client:

Allseas

Weight:

31,464 dwt

Date of Completion:

23 June 2014



Services: Plant Maintenance & Turnaround



Turnaround Main Mechanical & Mechanical Static (TA4MS) Master Service Agreement



Client:
Malaysia Refining Company Sdn Bhd

Date of Completion:
28 February 2024 (*ongoing*)



Plant Shutdown



Client:
Idemitsu SM (M) Sdn Bhd

Date of Completion:
10 May 2019



Annual Maintenance



Client:
PETRONAS Lubricant International Sdn Bhd

Date of Completion:
March 2020



Services: Other Services



OSX-3 Turret



Fabrication of a turret for OSX-3 FPSO

Client:
Sofec Inc

Weight:
31,464 dwt

Location:
Campos Basin, Offshore Brazil

Date of Completion:
16 February 2013



Facilities Improvement Project



- *Provision of Project Management Team (PMT) Services*
- *Provision of Report & Procedures*
- *Provision of Procurement Services*
- *Provision of Construction Services*
- *Provision of Hook Up & Pre-Commissioning*
- *Start Up and Commissioning*
- *Handover & Project Closure*

Brownfield (424 days)

Client:

PETRONAS Carigali Sdn Bhd

Date of Completion:

March 2018



Centre of Excellence (CoE)



Centre of Excellence (CoE)



Contact us now for more info:
coe@mmhe.com.my

A learning centre for oil & gas and marine industries

Equipped with training facilities which include simulator for confined space, areas & tools for scaffolding and an auditorium



Advanced **4-ACRE TRAINING CENTRE**
located in Pasir Gudang, Johor, Malaysia



Learning process takes place in a
SAFE & CONTROLLED ENVIRONMENT



Training capacity of **135,000** mandays annually



Real and hands-on **EXPERIENCE**



ACCREDITATIONS & CERTIFICATIONS
by relevant bodies



A MEMBER OF MISC GROUP

THANK YOU