



COMPANY
PROFILE
2026

MHA AUTOMATION ENGINEERING SDN BHD

Electrical, Instrumentation & Mechanical Solutions for FPSO, FSO, LNGC, FSU & OSV across Malaysia & Singapore


Expert solution provider & technologies integrator for the industrial, marine and oil & gas industry — your ONE-STOP-SOLUTION centre, on land and at sea, around the clock.

⚙️ PETRONAS Licensed Company · 100% Bumiputera · Since 2014 · 10 Years+ in service

Engineering excellence, built on real-world experience


MHA Automation Engineering Sdn Bhd is led by a team of engineers with extensive technical knowledge and experience in the Marine and Oil & Gas industry. Established in 2014 and incorporated in 2016, we are committed to serving as a trusted solution provider and technology integrator — a ONE-STOP-SOLUTION centre delivering cost-effective, environmentally sustainable, and innovative solutions to our valued customers. We specialise in serving FPSO, FSO, LNGC, FSU and OSV operators, shipyards and petrochemical plants throughout Malaysia and Singapore.

<p>10+ Years of Experience</p>	<p>11+ Core Service Lines</p>	<p>200+ Projects Delivered</p>	<p>100% Commitment to Quality</p>
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Our Vision

To be the preferred integrated engineering partner in the marine and offshore industry across the region.



Our Mission

To serve ship and offshore asset owners by delivering excellent integrated engineering solutions through strategic collaboration with our principal manufacturers and our highly skilled local workforce — committed to adhering to global industry standards with safety, quality, and integrity.

2014
ESTABLISHED ·
INCORPORATED 2016

“Strategically located in Johor — Malaysia’s southern gateway, just minutes from Singapore — enabling us to serve customers across the region seamlessly.”

5 min to MMHE Shipyards	5 min to Johor Port
30 min to PETRONAS Pengerang	30 min to Tanjung Pelepas Port

FPSO FSO LNGC FSU OSV Oil & Gas

Quality you can trust, standards you can verify

MHA Automation Engineering is certified by international and local certification bodies, ensuring our services meet the highest standards of quality, safety, and compliance — and qualifying us for government and Fortune 500 tenders.


ISO 9001:2015
Quality Management System


ISO/IEC 17025:2017
Testing & Calibration Accreditation


PETRONAS Licensed
100% Bumiputera Company


MOF & CIDB
Registered for Government Tenders

Class B Electrical Contractor
Energy Commission (ST) Malaysia


Cost-Effective
Solutions optimized for value without compromising quality.


Environmentally Friendly
Sustainable engineering that respects the planet.


Innovative
Modern technology integration for future-ready operations.


Reliable
Dependable delivery backed by real field experience.

Partnering with industry leaders

We're proud to have earned the trust of 30+ Fortune 500 companies and respected local and international organizations.



Full-spectrum engineering & technical services



Electrical Engineering

Complete LV & HV electrical works for vessels, plants and terminals — from design and fabrication to installation and commissioning.

LV & HV switchboards

Control panel design & fabrication

UPS & power distribution

Star-delta motor starters

Cable laying & cast-resin jointing

IEC earthing & lightning protection

Fire alarm panels

Ex-proof & LED lighting



Instrumentation & Control

Precision instrumentation and control that keep process, safety and monitoring systems reliable and compliant.

Fire & Gas detection

Emergency Shutdown (ESD)

Inert Gas (IGG) systems

Tank gauging & overfill alarms

Oily-water separator / 15ppm OMD

PLC programming & I/O

High-level alarm & sensors



Calibration Services ISO/IEC 17025

Accredited calibration of engine safety devices, analysers and field instruments to the ISO/IEC 17025:2017 standard.

Load cells

Flow meters

Pressure gauges

Dewpoint & moisture analysers

Electro-pneumatic converters

Engine safety devices & transmitters



Mechanical Engineering

Repair, overhaul and fabrication for rotating equipment and shipboard mechanical systems.

Compressor overhaul (air-end & IGG)

Pump overhauling

AC motor rewinding

Vent fan & motor overhaul

Bearing inspection & replacement

Crane & lift refurbishment

Hydraulic cylinders & valves

Gantry crane fabrication



AI Security & Surveillance

Intelligent CCTV and access control engineered for hazardous, marine and corrosive environments.

Ex-proof & 316L corrosion-proof CCTV

Centralized VMS

AI video analytics

Thermal & optical imaging

Access control

Perimeter intrusion detection



Communications & PAGA

Critical safety communication and network infrastructure for marine and industrial sites.

Public Address & General Alarm (PAGA)

Public address & intercom

Fibre-optic cabling & splicing

Structured / data cabling

Telecommunication systems

Products & solutions

A growing range of marine & industrial solutions — from Ex-proof lighting to detection, corrosion prevention, alarm monitoring and predictive analytics.



Power Technologies — IOT, Big Data & AI Predictive

Energy-harvesting wireless sensors feeding real-time, AI-driven predictive analytics. Battery-free, voltage-free, maintenance-free.



PTSPS061

World's Smallest Self-Powered Wireless Temperature Sensor

Monitors temperature at electrical junctions inside HV & LV switchgear. Energy harvesting (no battery), full electrical isolation, zero maintenance.



PTSPS120

Roller Belt Temperature & RPM Monitoring Sensor

Real-time wireless roller temperature & RPM monitoring to prevent bearing failure and fire. IP68, V0 flame-retardant, ±1°C.



PTSPW2000F

HMI Receiving Module

Touchscreen HMI for continuous thermal monitoring — 90-day trending, 10,000-event log, alarm dry contacts and USB export.



Standard Luminaire — LED Lighting

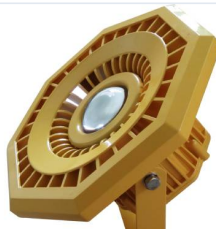
Energy-efficient, durable industrial & marine LED lighting and Ex-proof products engineered for harsh environments.



NE-T1 Series

Ex-proof LED Linear Light

For hazardous areas — oil fields, refineries, offshore platforms, power plants, tanks, wharfs, tunnels & substations.



CP-T1 Series

Ex-proof LED Flood Light

High-end programmable ELG-series driver with integrated dimming and 4kV surge protection.



SH-T1 Series

Tri-proof LED Light

Designed for hazardous & corrosive areas across marine, oil & gas and industrial facilities.

FE-T1 FT-T2 LS-T1

AO-T1 + full range

Detection & corrosion prevention



Specs — Oil Mist Detection (OMD)

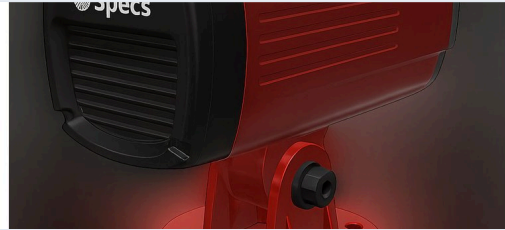
Marine detection & condition-monitoring systems — early warning against engine fire, explosion and mechanical failure.



Crank Case Oil Mist Detection

COMD · Engine Crankcase

Measures oil mist inside engine crank chambers. When concentration exceeds the set value, an alarm is triggered to prevent the risk of engine explosion.



Atmospheric Oil Mist Detection

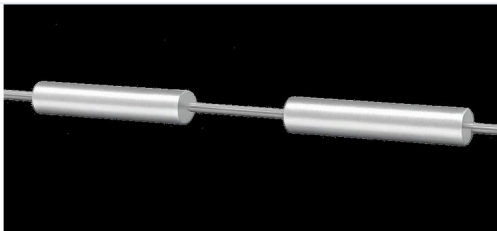
AOMD · Engine Room

Measures oil mist in the engine room and other areas with oil-using machinery, alarming before a dangerous concentration is reached.



TOPCORR — Corrosion Prevention System

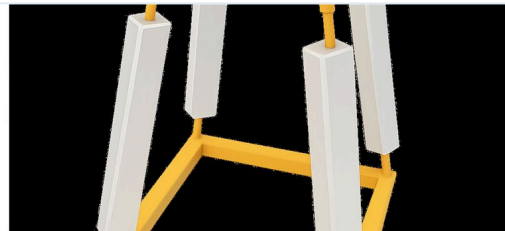
Cathodic protection for marine & offshore structures — hulls, ballast tanks, jetties and platforms, with optional remote monitoring.



Impressed Current (ICCP)

Impressed Current Cathodic Protection

MMO flexible & tubular anodes, high-silicon cast-iron anodes, oil-cooled transformer rectifier and reference electrodes for active, controlled corrosion prevention.



Sacrificial Anode (SACP)

Sacrificial Anode Cathodic Protection

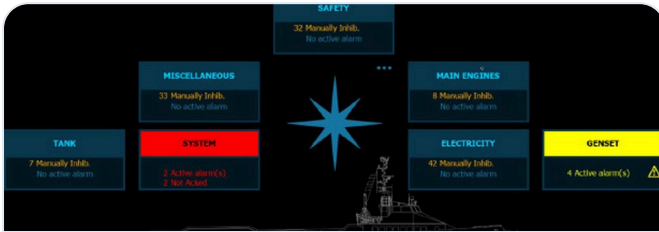
Aluminium, magnesium, zinc and aqueous-Mg sacrificial anodes, plus SLED and string anode systems suitable for offshore platforms.

Alarm monitoring & marine safety



Marinelec — Alarm Monitoring System

Marine alarm, monitoring & safety systems — integrated alarm & monitoring, fire detection, navigation-light control and bridge alerting for vessels.



M.TASK

Integrated Alarm & Monitoring System

Scalable Integrated Alarm, Control & Monitoring System — digital/analog I/O, tank levels, engine-watch and duty-officer alarms, with remote SMS/email transmission.



PHOENIX V2

Addressable Fire Detection

MED/CCS-approved addressable fire-detection panel. Up to 16 loops of 126 points, networking of up to 10 panels, integrated short-circuit isolators.



ORION V3

Engine Order Telegraph

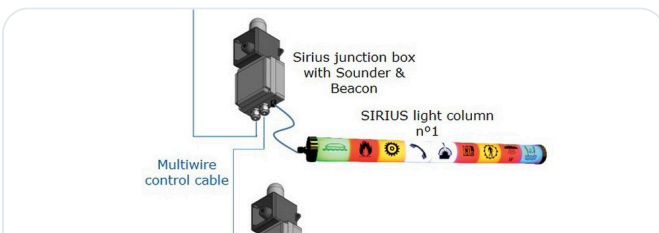
Bureau Veritas-approved engine order telegraph between engine room and wheelhouse. Up to 11 channels, multi-station takeover, VDR & printer outputs.



NORMA AFF

Navigation Light Control & Monitoring

Controls and monitors up to 48 navigation lights with automatic switchover and failure detection — breakage, short-circuit, fuse and supply faults.



SIRIUS

Audible & Visual Alarm Column

Sounder and multicolour RGB LED beacon / light column for alerting in noisy areas. IMO-standard pictograms, MED-approved fire-alarm tones.

Marine & oil & gas CCTV



Videomarin — Marine & Oil & Gas CCTV

CCTV systems purpose-built for the marine and oil & gas industry — explosion-proof, corrosion-proof and rapid-deployment cameras for vessels, platforms, terminals and hazardous areas.



VEH610C Series

Explosion-Proof Integrated Camera Housing

Ex d flameproof integrated housing — transmission, camera and power chambers (A-variant adds an IR light chamber). O-ring & lip-seal protected, Ex tb dust-ignition, IP68 (1.2 m / 45 min).



VRC4G0-OS

HD IP 4G Rapid-Deployment Dome PTZ · Solar

Portable 4G HD PTZ in a carry case — built-in lithium battery pack and solar panel, acousto-optic alarm, waterproof & shockproof. Deploys in minutes for temporary monitoring and emergency command.



VCH760Z

Marine Corrosion-Proof PTZ · 2MP 33x Zoom

Stainless-steel 304 / 316L marine PTZ housing with wiper and IR lights, 2MP 33x zoom camera. IP68-rated for corrosive offshore, coastal and deck environments.

Datasheets available on request

Full technical datasheets for every product are available at www.mhaautomation.com or from sales@mhaautomation.com

Proven delivery for marine, oil & gas and industry



Power & Lighting

VALE VMM

📍 Lumut, Perak

- HID→LED lighting upgrade at Export Cranes DN10-12
- DIALUX lighting design & simulation
- EPIC of LED lighting at import area



Security & CCTV

Malakoff

📍 Tanjung Bin Power Plant

- Integrated security CCTV & intercom for boiler lift
- Process & security CCTV server



Marine E&I

Eaglestar — FSU Tenaga

📍 Sg. Udang Anchorage, Melaka

- Accommodation LED lighting renewal
- ESD system renewal & softstarter upgrade
- Process CCTV & electrical control panel



Marine — Tug & OSV

Kejora Resources

📍 Johor Port · PTP · West Port

- M&E & automation for tugboats / pushers
- E&I system troubleshooting
- Annual drydocking repair & maintenance



PAGA & Comms

BW Offshore — LNG OYO

📍 MMHE, Pasir Gudang

- Upgrade of complete PAGA system — analogue to full IP



Offshore Security

Kasawari, PETRONAS

📍 MMHE, Pasir Gudang

- Deployment of PETRONAS AISC safety cameras
- On the CPP processing module construction

Project references (continued)



Electrical (E&I)

PRefChem

📍 Pengerang, Johor

- Rectification of damaged electrical equipment at HDPE
- Supply & laying of new cable & cable tray



CCTV & Automation

MSM Sugar (Johor)

📍 Tanjung Langsat, Pasir Gudang

- CCTV for process area, warehouse & watergate
- Integrated video conference system
- VFD control panel



Offshore Mechanical

FPSO Kikeh — Bypass Swivel Unit

📍 Offshore Sabah

- Fluid swivel unit bypass works
- Offshore mechanical dismantling & re-installation

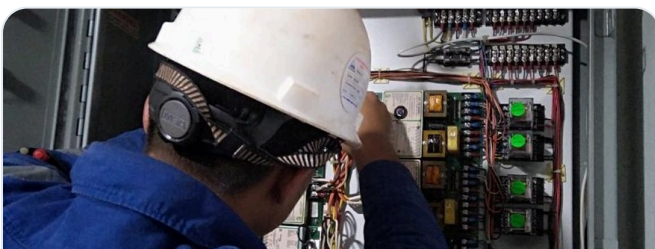


E&I & CCTV

Petron Fuel International

📍 Johor Port, Pasir Gudang

- E&I & automation maintenance (CCTV & PA)
- Analogue → full IP CCTV incl. explosion-proof
- New LED lighting & ex-proof intercom refurbishment



Calibration · ISO 17025

Testing & Calibration

📍 On-site & Workshop

- On-site & workshop testing and calibration
- Engine safety devices, transmitters & field instruments



Mechanical

Mechanical Scope

📍 On-site · Vessel Deck

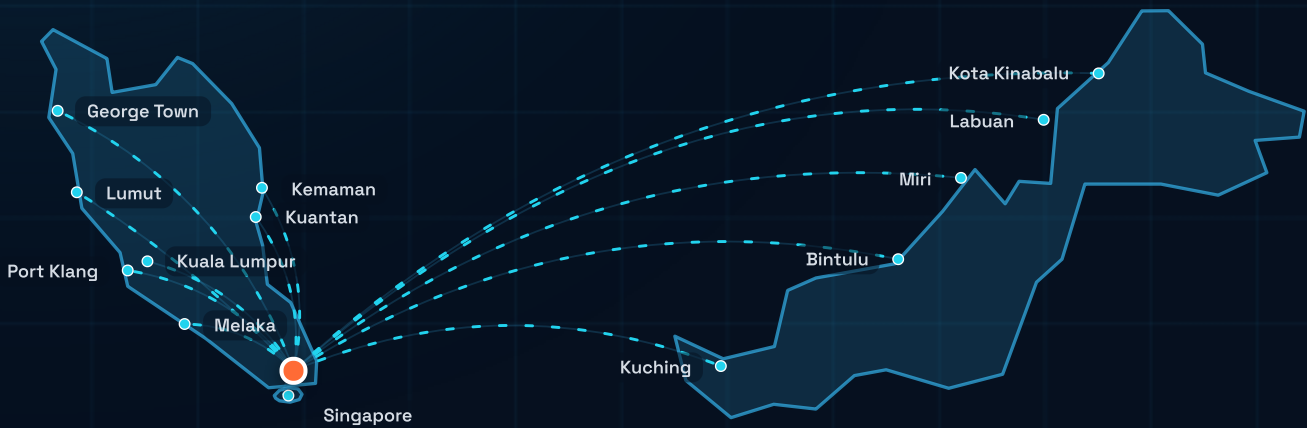
- On-site mechanical works — lifting, rigging & assembly
- Dismantle, overhaul & servicing of deck equipment
- Re-installation & alignment

GET IN TOUCH

Let's engineer your next solution — The Right Solution at The Right Time.

Serving clients across Malaysia & Singapore

On land and at sea, around the clock · HQ Masai, Johor



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🏆 Credentials

PETRONAS Licensed · 100% Bumiputera
ISO 9001:2015 · ISO/IEC 17025:2017
MOF · CIDB · ST Class B

🌐 Coverage

Serving clients across Malaysia & Singapore —
on land and at sea, around the clock.

