LIMPAHAN ENGINEERING

**PRECISION POWERING PROGRESS** 

# RESSPRECISIONPOWERIE SIONPOWERINGPROCESSION NGPROGRESSPR

# LIMPAHAN ENGINEERING SDN. BHD. (1371198-M)

Lot 5087-A PKINK, Jalan Padang Tembak, Kawasan Perindustrian 2 Pengkalan Chepa, 16100 KOTA BHARU.

Liaison Office: D-3A-05, Block D, Oasis Square, Jalan PJU 1A/5, Ara Damansara, 47310 PETALING JAYA.

Maintenance, Repair and Overhaul (MRO): Tok Bali Supply Base (TBSB), Jalan Tok Bali, 16700 PASIR PUTEH \*Revised 20 Feb 2024

"Precision is the art of turning challenges into the exquisite, where every movement is a masterpiece"

Kamarul Hafiz, **MD/CEO** 9.00  $\bigcirc$ 0 Welcome to LIMPAHAN. You'll be in GOOD HANDS

### **LIMPAHAN In Brief**

We are a group of highly passionate people who put solving your pain points as our priorities. We have demonstrated our persistence, building on our strengths and determination to be a key contributor in the high precision machining, metal fabrication, Maintenance, Repair and Overhaul (MRO) and Tools, Dies and Moulds (TDM).

We have been active servicing the energy industry – both in the traditional oil and gas offshore operation and the new sustainable green Hydrogen generation. We have also served the general manufacturing industry in their MRO and TDM needs.

At Limpahan, we believe that **precision** in engineering execution **powers progress**.

# OUR CORE CAPABILITIES

ENGINEERING DESIGN, PRECISION MACHINING FABRICATION, MAINTENANCE, REPAIR, OVERHAUL (MRO) TOOLS, DIES, MOULDS (TDM)

### Journey of a THOUSAND MILES...

Limpahan Engineering was incorporated in June 2020, in the middle of the COVID-19 Pandemic Movement Control Order (MCO), when our first CNC machine was delivered to site in Pengkalan Chepa.

We have never looked back ever since. We marched through the unprecedented period and built our competence, capability, capacity and trustworthiness with every delivery to our customers.

We are in the final steps to be certified to the ISO Trinity – Quality Management System ISO9001, Occupational Health and Safety Management System ISO45001 and Environmental Management System ISO14001 by October 2023. We are also in good progress to be certified to Aerospace Quality Management System AS9100D by December 2023.

### ..Starts with a single STEP.

Our presence:



Head Office & Operation: Lot 5087-A PKINK, Jalan Padang Tembak, Kawasan Perindustrian 2 Pengkalan Chepa, 16100 KOTA BHARU.



Maintenance, Repair and Overhaul (MRO): Tok Bali Supply Base (TBSB), Jalan Tok Bali, 16700 PASIR PUTEH



Liaison Office: D-3A-05, Block D, Oasis Square, Jalan PJU 1A/5, Ara Damansara, 47310 PETALING JAYA.

### NILAI LIMPAHAN OUR CORPORATE VALUES

#### **SAFETY**

We keep our stakeholders safe. Our loved ones shall have the peace of mind at all times. Everybody Returns Home Safely.

### INTEGRITY

We execute our duties with utmost integrity. We do the right thing even when nobody's watching. There is only Black or White.

### INNOVATION

We explore new ways of succeeding together with our stakeholders without the fear of failure. Sky is the limit.

### QUALITY

We aspire to consistently meet all stakeholders' expectations. Our People employ the best Process & Technology. **Do It Right The First Time, All The Time.** 

### AGILITY

We are responsive to our stakeholders' needs. We push boundaries. There is no constraint to what we can do. **Everything is Possible** 



"Bijok dan Biso. The best words to describe our PEOPLE. Our most important asset.."

Akalili, Human Resources

### PEOPLE

We develop and empower our people. We ensure alignment to a unified vision. We grow with our diversity. **Our People are Our Greatest Assets.** 

Picture shown is our staff during Daily HSE ToolBox Briefing

### Dato' Naza Haron Chairman

Key Strategist & Pathfinder Vision & Mission

### **Kamarul Hafiz**

Managing Director Technology Frontier Financing & Growth Strategy Business Development Decision-maker

### Sukri

**Engineering & Production Director** Key Technical Expert Engineering & Production Management Product Development Equipment Productive Maintenance Facility Management

### Hakimi

Corporate Services Director Key QHSE Expert Risk & Compliance Management Process Development Business Improvement Digitalization Management

# LEADERSHIP

KNOW THE WAY GO THE WAY SHOW THE WAY

# KEY ENABLERS MAKE EVERYTHING POSSIBLE

<u>(e</u>

# **OUR YOUNGS**

# Afifah

**Finance Assistant Manager** 

### Zulhilmi

Design / Mill Lead

Zubaidi

**Senior CNC Machinist** 

### Hilmi

CNC Machinist, Maintenance & Tooling Management

### Hishamuddin

Fabrication & MRO Specialist

### Aisyah

**Procurement Executive** 

Arfan

**Process & Quality Assurance** 

Syabil

Quality Control Officer Syahmi

HSE Executive Akalili

**Human Resources Executive** 

# Our Core Competencies

We offer bespoke engineering solution to our customers in the provision of design, development, prototyping and volume processing of high precision mechanical components and spare parts.



### High Precision Machining

Our state-of-the art CNC machining centers are operated by highly competent machinists capable of producing components with +/-10 microns precision.



#### Maintenance, Repair & Overhaul

We are capable of executing insitu maintenance, repair and overhaul work in the comfort of our customers' facility. For offshore Oil and Gas, we could run threading and capping of tubulars.



# Industrial Fabrication & Facility Decommissioning

We could fabricate complex mechanical structures and reverse it – i.e. cutting and disassemble them into pieces for decommissioning of facilities and structures.



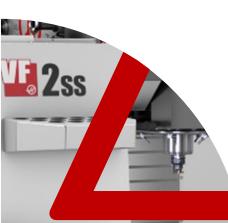
#### **Tools, Dies and Moulds**

We could design, develop and fabricate high precision Tools, Dies and Moulds for stamping, blanking, injection molding and Hydroforming operations.

# High Precision Machining

Our state-of-the-art CNC machining and turning centers are operated by highly competent machinists capable of producing components with +/-10 microns precision.





### Green Hydrogen Generator

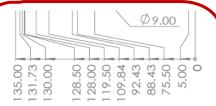
#### Hydrogen Electrolyser Anodes and Cathodes

We are the pioneer of high-precision machining of PEM Hydrogen Electrolyser Anodes and Cathodes with complicated features on Titanium Grade 2. We are bound by NDAs, so that's all you could know for now!

### Hydrogen Fuel Cell Bipolar Plates

Our aggressive Research and Development with a premier varsity in Malaysia will enable us to produce our own Hydrogen Fuel Cell in the near future.





#### Offshore Oil & Gas Facilities Parts

Reverse engineering on heavy and rare mechanical components and EOL spare parts for Hydraulic Workover Units (HWU) and other offshore equipment.

#### Manufacturing/Factory Jigs & Fixtures

Elevate Perfection - Our Craftsmanship meets innovation as we engineer bespoke fixtures and jigs, optimizing your manufacturing excellence.

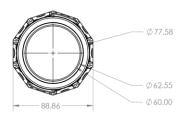
#### Aerospace & Aviation Components

Flight Excellence - Our Crafting precision ensures sky-high quality and soaring performance in every component.

# **Maintenance, Repair** and Overhaul (MRO)

Reverse engineering on heavy and rare mechanical components EOL parts and spare for Hydraulic Workover Units (HWU) and other offshore equipment.





### **Spare Parts Fabrication**

Cannot find the end-of-life spare parts? We'll reverse engineer your existing spare parts and reproduce you the exact replacement.



### **Tubulars Threading**

tubings, connectors, conductors, and pipe from 1" to 40". Our process and services meet the related codes required by OCTG governance.

### **Tubular Capping & Coating**

We protect your tubulars and their threads by capping them. We protect the inner and outer surface by coating to any codes you require.



#### **Spare Parts Regeneration**

With additive manufacturing, we could find ways to regenerate your worn-out parts and save you and the environment all in one go.



### **Failure Analysis**

We disassemble your equipment, run failure analysis and prescribe corrections and corrective actions.

**Services** 

We thread tubulars - casings,

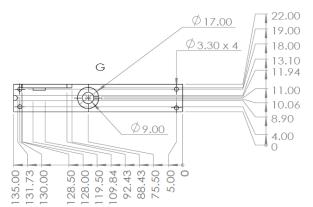
# Tools, Dies and Moulds (TDM)

Whether you are in need of a stamping tool, a blanking die or an injection moulding mould, we could design, develop and fabricate one for you. In record time.



### Injection Moulding Moulds

Crafting Perfection: Transform Your Designs into Reality with Our Expert Injection Molding Molds. Unparalleled Quality and Precision Redefined





#### **Hydroform Tools & Dies**

Shaping Innovation: Harness the Power of Hydroforming with Our Exceptional Molds. Achieve Complex Designs with Precision, Durability, and Flawless Execution



### Stamping and Blanking Tools & Dies

### **Tools & Dies Fabrication**

Precision at Every Press: Elevate Your Production with Our Exceptional Stamping Die Expertise. Quality Craftsmanship Redefining Industry Standards

### **Tools and Inserts Maintenance**

Empower Your Precision: Unleash Efficiency and Durability with Our Superior Stamping Die Tool Inserts. Elevate Your Output with Confidence



# Industrial Fabrication & Facility Decommissioning

We could fabricate complex mechanical structures and reverse it. We design, develop and fabricate your structures and when it comes time to decommission, we disassemble, cut, inspect and dispose per your requirements.



### General Structure Fabrication

### Precision Welding

Our certified welders are capable of giving you reliable welds using the latest TIG and MIG welding methods.

### **Additive Manufacturing**

Revolutionizing Reusables: Save the environment by preventing waste – both in new component fabrication and spare parts reclaim and refurbishment. We run additive manufacturing then mill for accuracy.



# Decommissioning and Disassembly

We support Decommissioning Project Managers to ensure your facilities (offshore and onshore) are efficiently and safely decommissioned

#### Manufacturing Jigs & Fixtures

We get you to be at your most productive zone with our reliable, precision and lowmaintenance jigs and fixtures.



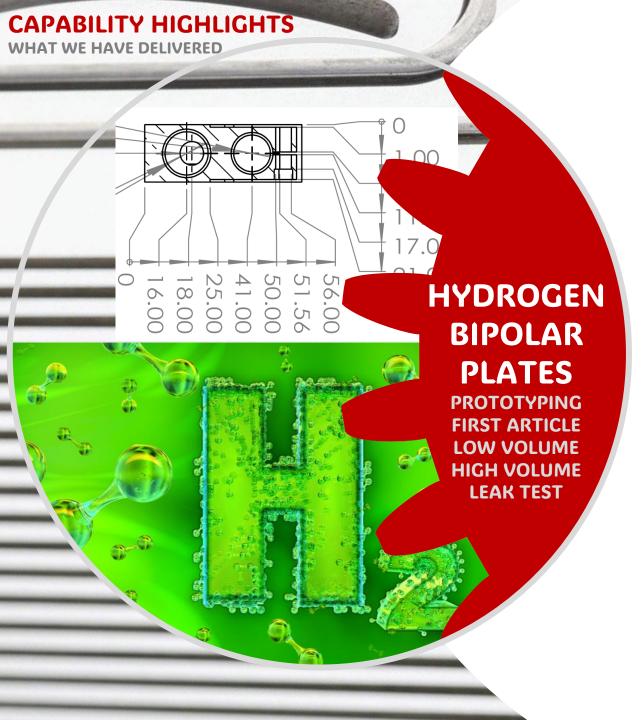
### **Specialty Trucks**

We design, develop, fabricate and process statutory vehicle applications to make your customized offroad/ specialty trucks road-legal

### **CAPABILITY HIGHLIGHTS**

WHAT WE HAVE DELIVERED

### SPECIALTY TRUCKS DESIGN DEVELOPMENT FABRICATION LEGALIZATION



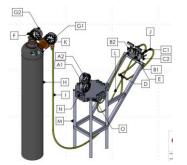
# THE PATH LESS TRAVELLED

OUR JOURNEY ON ENERGY SUSTAINABILITY

While the world seems to focus on solar as the renewable energy of choice and Battery-driven EV as the fast-growing mobility, we chose to differ.

We chose to focus our efforts on Hydrogen. It is one of the most abundant resource in the world and we think that it is a greener choice. We have been working and shall continue to push the boundaries of Hydrogen Fuel Cell EV as the prominent future transportation normals.

We have been working hand-in-hand with the nation's respected research and development centers and have been part of the team who studied, produced, verified, tested and validated the bipolar plates for the prototypes of the nation's first Hydrogen Electrolysers.



## **CAPABILITY HIGHLIGHTS**

WHAT WE HAVE DELIVERED

PRECISION PARTS DESIGN DEVELOPMENT PROTOTYPING VERIFICATION VALIDATION LOW VOLUME

റ

0

О

0

Our 5-Axis CNC Milling Center is capable to produce very complicated design traditionally not within reach of the conventional Milling machines. We could consistently meet tolerance of up to +/-10 microns and we have been delivering this since 2021.

Ð

О

### **CAPABILITY HIGHLIGHTS**

# SPARE PARTS

REVERSE – ENGINEERING: 3D SCANNING CAD & DRAFTING PROTOTYPING VERIFICATION VALIDATION PRODUCTION



TRANSFORM YOUR OUTDATED SPARE PARTS INTO OUTSTANDING FUNCTIONAL AND RELIABLE PARTS WITH OUR REVERSE-ENGINEERED COMPONENTS SERVICES

**OUT** DATED STANDING



# OUR CUSTOMERS

SYMBIOTIC RELATIONSHIPS























Opt aplus sdn. bhd.













"Our suppliers and us sleep in the same bed. They sneeze and we'll catch a cold. That's how important our relationships are – with our customers and external providers.

Hakimi Nasir, Corporate Services

LIMPAHAN INNOVATIVE PARTNERSHIP

### **RESEARCH & DEVELOPMENT AND COLLABORATIONS.**

**OUR CONCEPTUALIZATION OF** THE FUTURE ALIGNS US WITH THE NATION'S PREMIER TECHNOLOGY **CENTERS AND KNOWLEDGE BANKS WHERE WE COLLABORATED AS THEIR DEVELOPMENT AND SMART PROTOTYPING PARTNERS.** 



**PUSHING THE BOUNDARIES** 

In our quest to make the world a better place for our next generation, we have collaborated with premier research and development centers in Malaysia to push the boundaries in renewable energy possibilities, focusing on green hydrogen generation and its value ecosystem. Watch this space for more breakthroughs in years to come.



Universiti KEBANGSAAN MALAYSIA

The National University of Malaysia

- **HYDROGEN FUEL CELL, PROTON EXCHANGE MEMBRANE PLATINUM COATING**
- **PEM HYDROGEN ELECTROLYSER**

RESEARCH

PETRONAS

(FUTURE): HYDROGEN **STORAGE** 

**IN-SITU MACHINING** 

HIGH PRECISION PARTS TOOLS, DIES AND MOULDS GENERAL METAL FABRICATION

### PIPE THREADING SERVICES

- PETRONAS
- ENGINEERING EQUIPMENT AND MACHINERY

MACHINING WORKSHOP





LIMPAHAN ENGINEERING



# RESSPRECISIONPON IONPOWERINGPRO RINGPROGRESSPRE

GET IN TOUCH WITH US. LET'S GROW TOGETHER AND STRIVE TO MAKE THE WORLD A BETTER PLACE



We Aspire to be a KEY PLAYER in Assisting the National Agenda to Move Towards a DEVELOPED NATION and a ZERO CARBON Citizen of the World.

We Plan to DO This by Solving the Mechanical Systems PAIN POINTS of the INDUSTRY Players; and for Ourselves, to be a Net ZERO Carbon Operation.

### LIMPAHAN FOR THE FUTURE MAKING THE WORLD A BETTER PLACE