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School of Mechanical Engineering, Universiti Sains Malaysia

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Editorial Board

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Inside the Issue

Recent Publications

Published
1. Z. K. Wani et al., Materials Today: Proceeding, In Press, 2022.

Active Grants

STG - Matching
Title: Tribological Performance of Additive Manufactured Aluminum Alloys, 2021-2023

PRGS Grant
Title: Prototyping of hybrid machine; 2019-2022

Preface

Final year project is a climate and most challenging task of any undergraduate students. Begin from selection of title until submission of the final thesis and presentation, requires proper planning and strategies. Still remember, back in 1999, author's experience on this matter was full of suspense as the project is considered failed as the main aim of objectives of the project not met. Although it is not the author's mistake, but it was stressful. Fortunately, during the viva and final year project presentation, the examiner was very kind and ask very general question and Alhamdulillah, full of relieve after the course was passed.

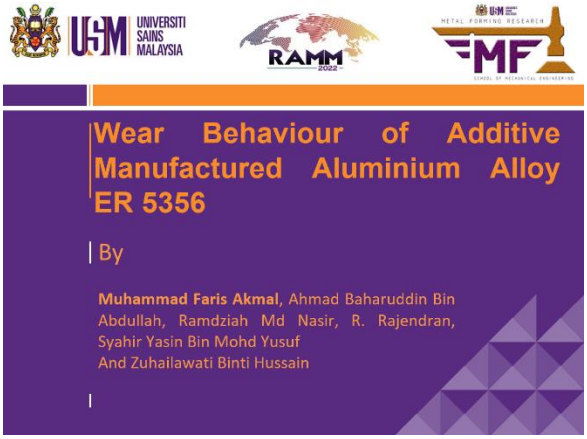
This week, final year students at the School of Mechanical Engineering is gaining their experience as each of them will present their result and findings. After all effort made, hard work, passion and tears, it's now at the end.

This year, four students work under project related to the Metal Forming Research Lab, one project about the hybrid machine, another project on device to help farmer in their work and a project on design and test of DIY machine body mainly for 3D welding machine. Last but not least, a last-minute change on project scope, from a simulation based into fully experimental based investigation. Alhamdulillah all of them managed to complete the task dan waiting for their turn to present their discoveries.

The most important is their learned something from the exercise, not just completing the task given. Because FYP not just need effort but also good planning and a small element of luck. Good luck for their future life as fresh engineer, face their new daily routine wisely and be a person that benefits the others.

Participation at RAMM 2022

One of our members, Muhammad Faris Akmal gained some experience during his participation at **7TH INTERNATIONAL CONFERENCE ON RECENT ADVANCES IN MATERIALS, MINERALS & ENVIRONMENT (RAMM) 2022** organized by the School of Materials and Minerial Resources Engineering, USM. The conference was successfully run online. His paper entitle Wear Behaviour of Additive Manufactured Aluminium Alloy ER 5356 is part of his Master study at the MFRL. This project is under SATU Joint Research Scheme granted in year 2021.



This is his first experience of oral presentation at international conference. Feedback given based on the questions given, depicted the area attracted many peoples and shows good potential in application likes for automotives part repair.

Sharing Session with Industries

Two sharing session to industry was successfully conducted in July 2022. First is the IEM Webinar Series with engineers and engineer to be on the topic of jig and fixture design. Another one, is face to face training on problem solving in metal forming process at Knowles Electronic Perai. It is an honor to have these sessions and opportunity to learn from the expert.

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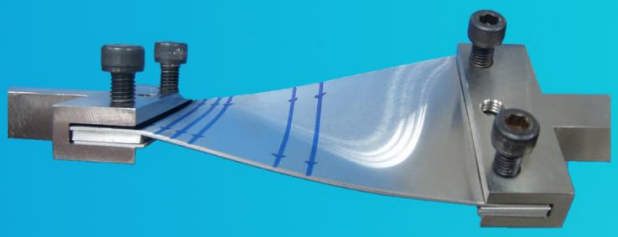
FACILITY AT METAL FORMING RESEARCH LAB

UNIVERSITI SAINS MALAYSIA

Twist Forming Machine

Can be used to perform;



Twist Forming Process

Torque on Test

Load cell Specification

Series: 615
Brand: Tedea-Huntleigh
Load capacity: 50 - 1000 kg
Compression-Tension

Equipped with S-type loadcell

For more information Please visit our website metalforming.eng.usm.my