



# Bulletin MFRL

School of Mechanical Engineering, Universiti Sains Malaysia

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#### **Editorial Board**

Preface

#### Gotong Royong

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#### **Recent Publications**

- 1. M. S. Abdullah, A. B. Abdullah. and Ζ. Samad, "Hole integrity carbon of fibre reinforced epoxy composites using punching combined drilling and techniques", Int. J. Adv. Manuf. Technol. 110, 2020, pp. 2517.
- Z.K. Wani and A.B. Abdullah, "A Review on metal 3D printing; 3D welding", 920(1), 2020, IOP Conf. Series: Materials Science and Engineering, 012015

#### **Active Grants**

RU Grant Title: Formability Analysis of Tailor Welded Blank of Steel and Aluminum Alloys, 2019- 2021

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



Metal Forming Lab is very honored to accept student for internship and happy when we are always chosen by students from outside to do their training. There are a lot of opportunities and activities that involve design and fabrication to support our research projects as well teaching facilities. Since the training period varies between 8 to 20 weeks, the training schedule is comprehensive, and tailor made to the needs of the current research activities. Even though without allowance, commitment given by the trainee was very good. Four students were successfully completed their internship from the lab as listed below.

- Kolej Kemahiran Tinggi MARA, Balik Pulau. (2 January – 18 May 2018)
- Politeknik Tuanku Syed Sirajuddin, Perlis (December 2019 – 26 April 2020) – but due to MCO, the training ends early.
- UniKL MIDI-MJHEP a Malaysia-Japan Higher Education Program (MJHEP) and University Kuala Lumpur MIDI at Mara Japan Industrial Institute (MJII) Beranang, Selangor (1 September 2020 – 23 October 2020).

In December, we will have another student to come from Politeknik Seberang Perai, Penang for 20 weeks. This is a good indicator, to show that the name of the lab is well-known and belief can provide a good venue for them to learn and to be trained. It is a tradition to the group, before every new academic session open, a "gotong royong" will be arranged. Not only to clean the mess in the lab after many research activities, but also opportunity to gather all members and this may create self-belongingship among the members. The program starts at 9.30 am and ends at 11.30 am and as usual lunch will be served. Below is the photo captured during the program.



Hopefully, this activity become a culture to all group members, not only during they are here but also when there are return to their workplace. Below is a gotong-royong photo back in 2016.



#### Virtual Group Meeting

On 28<sup>th</sup> of October 2020, the monthly group had been conducted online using Google Meet. Five of our members attended and presented their progress report. Since the modus operandi of the group research is via experimental, MCO affect a lot on our progress. However, I am very glad to hear most of them progress well even though may be slow. The online meeting allows our members whose already back to work or in RED zone that not allow them to travel or enter the campus attended the meeting. Alhamdulillah. #Staysafeguys.



## **Contact Details**

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# CALL FOR BOOK CHAPTERS

Title: Springback Assessment and Compensation of Tailor Welded Blanks ISBN: 9780367758349 Editors: AB Abdullah and MF Jamaluddin



Dear Honorable Prof/Dr/Researcher.,

As Editors of our forthcoming book, Springback Assessment and Compensation of Tailor Welded Blanks' we would like to call for chapter contributions for a selection of focused topics on the subject. The book will be divided into fifteen to twenty (15-20) chapters based on 10 focus topics given below and will be published by CRC Press.

Tailor welded blanks are innovative methods in weight reductions, safety, and performance strategies, especially for the automotive industry. However, there remains challenging issues on their springback assessment and compensations. Thus, this topic is timely and important for academics as well as the industry. As you are working in this important research area, it is our pleasure to invite you to contribute a chapter to the book. As leading researchers in this field, your contribution will be a worthy addition for knowledge sharing to a global audience. Your contribution may be in the form of your latest research or a review article related to the suggested focus topic, as follows:

### Focus Topics (but not limited to);

Topic 1: Springback: Measurement and Compensation

Topic 2: Springback of non-uniform thickness section

Topic 3: Springback of uniform/non-uniform thickness of similar and dissimilar material

Topic 4: Springback of uniform/non-uniform thickness welded blank using various welding techniques

Topic 5: Springback of tailor welded blank in incremental forming.

Topic 6: Springback of tailor welded blanks using FEM

Topic 7: Optimization of springback of tailor welded blanks.

Topic 8: Springback of tailor welded blanks in deep drawing

Topic 9: Springback compensation technique of tailor welded blank

Topic 10: Springback of tailor welded blank: industrial case study



The deadline for the abstract submission is on <u>31st December, 2020</u> and for the completed manuscript is on 1<sup>st</sup> October, 2021. There is NO fee for publication in the book. The length of the manuscript may be between 4,000-35,000 words. Please send your abstract and manuscript to mebaha@usm.my/ibnjamaluddin@um.edu.my). Further details on submission will be communicated after your abstract is accepted.

Please feel free to contact me if you have more specific questions. I will be happy to answer them as soon as possible. Looking forward to a positive response, Thank you

Your Sincerely AB Abdullah and MF\_Jamaluddin

# Advertisement Space (contact mebaha@usm.my)