

TITLE

Author1, Author2, Author3

1Author Affiliation

2Author Affilaitaion

3Author Affilaitaion

Correspondent email for main author

ABSTRACT

Friction Stir Welding (FSW) is a relatively new welding technique and its physics is still not widely known. Compared to fusion welding, this technique reduces problems associated with metal re-solidification as the technique involves no melting stages which is suitable for joining high strength aerospace materials such as aluminum metal matrix composite (AMMC). Initially FSW had been developed and successfully applied for welding softer materials such as aluminum alloy. Scarce research has been conducted on FSW of AMMC where the material has a higher stiffness, strength and wear resistance compared to monolithic aluminum alloy. The objective of this research is to compare the tensile strength of plate aluminum (AA6061) as a base material using Friction Stir Welding and Robotic Metal Inert Gas (MIG) Welding. The weld center showed a decrease in hardness and adequate retained material strength. The relationship of parameters is investigated by conducting a mechanical testing at the welded workpieces. Temperature distribution and current consumption during welding are recorded. Three sets of parameters are used which are 800 rpm, 1000 rpm and 1200 rpm for rotational speed with the same welding speed. It shows that higher rotational speed produces a higher strength weld which is 225.7 MPa when the rotational speed is 1200 RPM while for Robotic Metal Inert Gas (MIG) Welding also shows an increase but lower compared to FSW. MIG welding achieves the highest tensile strength 137.8 MPa at 138 A, 19.2 V. Friction Stir Welding provides various advantages in welding compared to the other welding method. This technique is highly recommended for aerospace applications since it has higher strength.

Keywords :

1. Introduction

Should discuss the problem statement, the background of the study, the contribution, the research objective and the question in paragraph form. The summary of paper structure also should be briefly discussed.

Should discuss the problem statement, the background of the study, the contribution, the research objective and the question in paragraph form. The summary of paper structure also should be briefly discussed.

Should discuss the problem statement, the background of the study, the contribution, the research objective and the question in paragraph form. The summary of paper structure also should be briefly discussed. The subtopic must be written as follows:

1.1 Agent B Theory

They are called

They are called

1.1.1 Round Robin effects

Some of the researchers

Some of the researchers

2. Literature review

Discuss about the empirical arguments thoroughly, don't forget to cited strong arguments, and discuss the hypothesis in here.

Discuss about the empirical arguments thoroughly, don't forget to cited strong arguments, and discuss the hypothesis in here.

H3. The monitoring effectiveness of female corporate leaders is more pronounced during the anti-corruption campaign period.

3. Methodology

Define abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract.

Define abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract.

4. Discussion of analysis and findings

The equation must be labelled following below:

Model equation is written as:

$$Y = mX + C \quad \dots [1]$$

The diagram/graph/table/picture must be labelled at the top of it in bold font. All table must be paste in editable format. DO NOT PASTE TABLE IN A PICTURE FORMAT.

Table 4.1: Result for each model

Model A	Model B	Model C

Diagram or Figure must be at the centre of the page as below. Label of the figure must be at the left side in bold font.

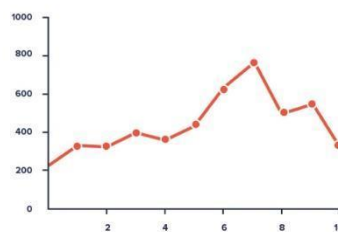


Figure 4.1: Stock price fluctuation

5. Conclusion and future research

Briefly discuss the issue, the argument you expected to be and the main findings. No table/graph/diagram is allowed here. Also discuss about the limitation and recommendation for future research.

Briefly discuss the issue, the argument you expected to be and the main findings. No table/graph/diagram is allowed here. Also discuss about the limitation and recommendation for future research.

6. References

Use the APA Referencing Style 6th edition for the references. The pdf file for “A Guide to APA Referencing Style: 6th Edition” can download by using this link

Example:

Waliuddin, M., Razali, M., Fui, W. Y., Shaharuddin, S., Tak, A. H., Uzairi, M., & Hajazi, A. (2017). Corporate Social Responsibility Disclosure and Cost of Equity Capital in Industrial. *Journal of Humanities, Language, Culture and Business*, 1(2), 168–180.

Waliuddin, M., Razali, M., Fui, W. Y., Shaharuddin, S., Tak, A. H., Uzairi, M., & Hajazi, A. (2017). Corporate Social Responsibility Disclosure and Cost of Equity Capital in Industrial. *Journal of Humanities, Language, Culture and Business*, 1(2), 168–180.

Waliuddin, M., Razali, M., Fui, W. Y., Shaharuddin, S., Tak, A. H., Uzairi, M., & Hajazi, A. (2017). Corporate Social Responsibility Disclosure and Cost of Equity Capital in Industrial. *Journal of Humanities, Language, Culture and Business*, 1(2), 168–180.

