



Adi Winarta <artawina@gmail.com>

Fw: [IJTech] Editor Decision

Nandy Putra <nandys04@yahoo.com>
To: Adi Winarta <artawina@gmail.com>

Sun, Feb 3, 2019 at 10:07 AM

----- Pesan yang Diteruskan -----

Dari: IJTech <noreply@ijtech.eng.ui.ac.id>
Kepada: "nandys04@yahoo.com" <nandys04@yahoo.com>
Terkirim: Jumat, 1 Februari 2019 16.22.40 WIB
Judul: [IJTech] Editor Decision



Decision Result : Revise

Dear **Prof. Nandy Putra**

We have finished the review and made decision on your manuscript entitled [**EXPERIMENTAL INVESTIGATION OF A LARGE SCALE-OSCILLATING HEAT PIPE AT DIFFERENT INCLINATIONS**] which was submitted to International Journal of Technology.

We have decided that your manuscript **Need to be Revised**

We also send you the review result from the reviewers. Here is the detail review result:

Notes from Editor:

Please revise according to reviewer's comment and it is suggested to include at least 2 relevant IJTech articles as references

Reviewer (1)

Introduction:

This paper examines the heat transfer characteristic of a large oscillating heat pipe (OHP) at various inclination angles. Literature studies have been done well using adequate references. However, there are still quite disturbing grammatical errors such as: 1. The first sentence in the abstract section: "This study As a family of heat pipes" 2. The first sentence in the introduction: "Hospital The oscillating heat pipe (OHP) is"

Methodology:

There are some typographical errors and misuse of the term that is quite disturbing. For example: 1. The last sentence in the abstract section: "... oscillation motion ...". In this case, "oscillatory motion" is more appropriate. 2. Line 4 in sub-section 2: It is not clear, whether Equation 1 is used to determine the thermo-physical data of the working fluid or is it to determine the diameter of the OHP? 3. Line 16 sub-section 2: "Based on Equation (3) ...". It should be Equation (2). 4. Line 23 and the following lines in sub-section 2: "A phase change of heat transfer processes ...", maybe what is meant is "Latent heat transfer" 5. The uncertainty analysis results are somewhat dubious, try checking again

Results and Discussion:

The following are some typographical errors and misuse of the term. 1. Sub-chapter 3.1: Title "Effect of power supplai ..." 2. The default power unit is "W" or "watt," not "Watt." 3. Figure 4 will be more appropriate if given the title "Effect of inclination angle on the range of OHP working temperature." 4. The caption in Figure 5 uses the term "minimal," it would be more appropriate to use the term "minimum." 5. Figure 5 does not describe the relationship between minimum temperature differences and the inclination angle, try to find a more appropriate title

References:

The references used are quite adequate

Other:

Conclusion section: The first sentence in the conclusions section: "To achieve a better understanding of the OHP of 500 mm, using a 60% filling ratio of methanol as a working fluid". This sentence is completely unclear. The four points of conclusions should be summarized into one or two statements regarding the effect of the inclination angle on OHP performance. It is unclear what is meant by "potential gravity" in point 3.

| | |
|----------------|----------------------------|
| Originality | 2 (<i>fair</i>) |
| Technical | 4 (<i>above average</i>) |
| Methodology | 4 (<i>above average</i>) |
| Readability | 1 (<i>poor</i>) |
| Practicability | 3 (<i>average</i>) |
| Organization | 3 (<i>average</i>) |
| Importance | 4 (<i>above average</i>) |

Additional Comment:

In order to be published, this paper is highly recommended for careful revision of grammar and terminology by professional English editors.

Attachment File:

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Reviewer (2)

Introduction:

The introduction has been written in a very systematic way, and easy to understand.

Methodology:

Please add nomenclatures for all equation used

Results and Discussion:

Please add some introduction before displaying Figures as the first paragraph of result and discussion.

References:

Lack of latest references

Other:

| | |
|----------------|----------------------|
| Originality | 2 (<i>fair</i>) |
| Technical | 2 (<i>fair</i>) |
| Methodology | 2 (<i>fair</i>) |
| Readability | 2 (<i>fair</i>) |
| Practicability | 3 (<i>average</i>) |
| Organization | 1 (<i>poor</i>) |
| Importance | 3 (<i>average</i>) |

Additional Comment:**Attachment File:**

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Please login into application <http://ijtech.eng.ui.ac.id/login> for more detail.

You must respond to this revise and resubmit request before **08 Feb 2019**, after which point we will presume that you have withdrawn your submission from International Journal of Technology (IJTech) Online System.

Yours sincerely,

Dr. Nyoman Suwartha
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Managing Editor
International Journal of Technology (IJTech)
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| Reviewer I comments | Author response |
|--|--|
| <p>This paper examines the heat transfer characteristic of a large oscillating heat pipe (OHP) at various inclination angles. Literature studies have been done well using adequate references. However, there are still quite disturbing grammatical errors such as: 1. The first sentence in the abstract section: "This study As a family of heat pipes" 2. The first sentence in the introduction: "Hospital The oscillating heat pipe (OHP) is"</p> | <ol style="list-style-type: none"> 1. As a family of heat pipes, the oscillating heat pipe has many additional unique operating parameters. 2. The oscillating heat pipe (OHP) is an up-and-coming passive thermal transfer device that transports heat by thermally excited oscillating motions of working fluid. |
| <p>Introduction The last sentence in the abstract section: "... oscillation motion ...". In this case, "oscillatory motion" is more appropriate.</p> | <p>Reducing the inclination also decrease the oscillatory motion, which is an obvious "heat carrier" from the evaporator to the condenser.</p> |
| <p>Line 4 in sub-section 2: It is not clear, whether Equation 1 is used to determine the thermo-physical data of the working fluid or is it to determine the diameter of the OHP?</p> | <p>The sentence already fix to The OHP was made from a copper capillary tube with inlet and outlet diameters of 1.7 mm and 3.2 mm, respectively. Those diameters based on the calculation of equation (1) below. Which is calculated using the fluid properties used (Taft, Williams, and Drolen 2012):</p> |
| <p>Line 16 sub-section 2: "Based on Equation (3) ...". It should be Equation (2).</p> | <p>Already revised</p> |
| <p>Line 23 and the following lines in sub-section 2: "A phase change of heat transfer processes ...", maybe what is meant is "Latent heat transfer"</p> | <p>Latent of heat transfer processes is involved during OHP operation, mainly as a driving force of working fluid motions.</p> |
| <p>The uncertainty analysis results are somewhat dubious, try checking again.</p> | <p>The sentence and calculation already check and revised. Power meter unit (Yokogawa WT210) was used to measure the heating power with an accuracy of $\pm (0.1\% \text{ of reading} + 0.1\% \text{ of range})$. If the minimum heat supply (reading) and selected range are 10 and 300 W respectively, then the maximum relative error is 3.04%. The thermal resistance error calculated using equation (4) with a minimum temperature difference between the evaporator and the condenser of 8.19 °C. The thermocouple of K type ($\pm 0.1 \text{ }^\circ\text{C}$ after calibration) and NI 9213 ($\pm 0.02 \text{ }^\circ\text{C}$ for temperature) results in a relative error of 4.5% using equation (4)</p> $\frac{\delta R}{R} = \sqrt{\left(\frac{\delta T}{T_e - T_c}\right)^2 + \left(\frac{\delta Q}{Q}\right)^2}$ |
| <p>Result and Discussion</p> | |
| <ol style="list-style-type: none"> 1. Sub-chapter 3.1: Title "Effect of power supplai ..." 2. The default power unit is "W" or "watt," not" Watt. " Already Revised | <p>Already revised.</p> |

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| 3. Figure 4 will be more appropriate if given the title "Effect of inclination angle on the range of OHP working temperature." | Already Revised |
| 4. The caption in Figure 5 uses the term "minimal," it would be more appropriate to use the term "minimum." | Already Revised |
| 5. Figure 5 does not describe the relationship between minimum temperature differences and the inclination angle, try to find a more appropriate title | Figure 5 Effect of inclination and heat supply to minimum temperature difference between evaporator and condenser. Include the explanations content. |
| <p>Other: Conclusion section: The first sentence in the conclusions section: "To achieve a better understanding of the OHP of 500 mm, using a 60% filling ratio of methanol as a working fluid". This sentence is completely unclear. The four points of conclusions should be summarized into one or two statements regarding the effect of the inclination angle on OHP performance. It is unclear what is meant by "potential gravity" in point 3.</p> | <p>Already revised. As seen below</p> <p>In this paper, experimental study were performed to achieve better understanding of heat transfer characteristic of OHP with 500 mm effective length (l_{eff}) using 60% FR of methanol for different inclinations. The conclusions obtained in the experiment are summarized as follows:</p> <ol style="list-style-type: none"> 1. The heat pipe work capability was decreased by almost 83.33% from a vertical to horizontal inclination. Inclinations affected the temperature fluctuations, operational range and heat transfer capability to absorb heat at the evaporator. Thus, it is finally reduce the capability of the OHP in handling the heat load. 2. The performance of the OHP with l_{eff} 500 mm decreased until 5.6 times due to orientation from vertical to horizontal. Inclination reduce the oscillation motion, which is act as "heat carrier" from the evaporator to the condenser. Inclinations also reduce the gravitation acceleration which occurred at highest level at vertical orientation. Hence, the restoring effect of working fluid decrease at reducing inclinations, which in turn affects the performance of the OHP. |
| In order to be published, this paper is highly recommended for careful revision of grammar and terminology by professional English editors. | Already revised |

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| Reviewer 2 comments | |
| <p>Introduction: The introduction has been written in a very systematic way, and easy to understand.</p> | |

| | |
|---|---|
| <p>Methodology: Please add nomenclatures for all equation used</p> | <p>Already revised (added a nomenclature)</p> |
| <p>Results and Discussion: Please add some introduction before displaying Figures as the first paragraph of result and discussion.</p> | <p>At the beginning paragraph, introduction figure already revised.</p> |
| <p>References: Lack of latest references</p> | <p>82.14% references are the latest 10 years (2009-2019). It's already review that large scale (effective length of OHP more than 300 mm) was still rarely.</p> |



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paper IJTech

A WINARTA <artawina@gmail.com>

Mon, Feb 4, 2019 at 8:32 PM

To: nandyputra@eng.ui.ac.id

Dear Prof,

Berikut saya kirim kembali, revisi paper IJTech dan Review Table. Terima kasih sebelumnya prof.

Best regards

adi winarta

2 attachments **Revised_Manuscript_IJTECH -with nomenclature.docx**
928K **Reviewer Table.docx**
18K