Anak Agung <agung589e@akprind.ac.id>

Submission Confirmation for An effect of velocity stack geometry on performance of a 150 cc-four stroke motorcycle - [EMID:49a0c812a2b49526]

EASR <em@editorialmanager.com> Wed, Feb 2, 2022 at 4:50 PM
Reply-To: EASR <kku.enjournal@gmail.com>
To: Anak Agung Putu Susastriawan <agung589e@akprind.ac.id>

Dear Dr Susastriawan,

Your submission entitled "An effect of velocity stack geometry on performance of a 150 cc-four stroke motorcycle" has been received by journal Engineering and Applied Science Research

You will be able to check on the progress of your paper by logging on to Editorial Manager as an author. The URL is https://www.editorialmanager.com/easr/.

Your manuscript will be given a reference number once an Editor has been assigned.

Thank you for submitting your work to this journal.

Kind regards,

Engineering and Applied Science Research

Anak Agung <agung589e@akprind.ac.id>

A manuscript number has been assigned to An effect of velocity stack geometry on performance of a 150 cc-four stroke motorcycle - [EMID:4ee583b8fdf8bce4]

EASR <em@editorialmanager.com> Thu, Feb 3, 2022 at 9:29 AM
Reply-To: EASR <kku.enjournal@gmail.com>
To: Anak Agung Putu Susastriawan <agung589e@akprind.ac.id>

CC: "I.G. Badrawada" goesti@akprind.ac.id, "Yoga Pradipta" ypradipta199@gmail.com

Dear Dr Susastriawan,

Your submission entitled "An effect of velocity stack geometry on performance of a 150 cc-four stroke motorcycle" has been been assigned the following manuscript number: EASR-D-22-00006.

You will be able to check on the progress of your paper by logging on to Editorial Manager as an author.
The URL is https://www.editorialmanager.com/easr/.

Thank you for submitting your work to this journal.

Kind regards,

EASR Engineering and Applied Science Research
Chief Editor
Engineering and Applied Science Research

Anak Agung <agung589e@akprind.ac.id>

Your Submission - [EMID:62674f95cc0d08f7]

EASR <em@editorialmanager.com> Mon, Mar 28, 2022 at 2:23 PM
Reply-To: EASR <kku.enjournal@gmail.com>
To: Anak Agung Putu Susastriawan <agung589e@akprind.ac.id>

Ref.: Ms. No. EASR-D-22-00006
Article Title: **"An effect of velocity stack geometry on performance of a 150 cc-four stroke motorcycle"**
Engineering and Applied Science Research

Dear *Dr Susastriawan,*

Reviewers have now commented on your paper. You will see that they are advising that you revise your manuscript. If you are prepared to undertake the work required, I would be pleased to reconsider my decision.

For your guidance, reviewers' comments are appended below.

If you decide to revise the work, please submit a list of changes or a rebuttal against each point which is being raised when you submit the revised manuscript.

Your revision is due by **2022-04-11 23:59:59.**

Our decision is to: Major Revisions Required

If your paper is revised, please kindly send 1. Full revised manuscript with highlight 2. Blind revised manuscript with highlight 3. Paper revising form 4. Certificate proofreading and 5. full revised manuscript (with track changes for proofread).

**** NOTE **** The revision of the article, **please highlight the text has changed** (**Use different colors for each reviewer**).

To submit a revision, go to https://www.editorialmanager.com/easr/ and log in as an Author. You will see a menu item call Submission Needing Revision. You will find your submission record there.

Yours sincerely

Sujin Bureerat
Editor
Engineering and Applied Science Research

Comments from the Editor and Reviewers :

Reviewer 2:

The manuscript titled "An effect of velocity stack geometry on performance of a 150 cc-four stroke motorcycle" is written without any clarity and novelty.
The does not have sufficient content and poor language.

Reviewer 3:

There are some grammatical errors in the manuscript that have been mentioned in the comments of the attached pdf file. Please make these corrections. Also, the following modifications and clarifications should be implemented in the manuscript before consideration for publication:
Section 3.1. line 121
These changes indicate that flow rates "slightly" increase with increasing fillet radius. Error bars are needed to see whether these changes are significant or not.

Section 3.2. line 136

What is the lambda values corresponding to the air flow rates reported for No VS, VS5, VS15 and VS25? The extent of change in lambda should be given so that the combustion efficiency can be analyzed more accurately.

Section 3.2. line 140
In order to present more accurate analysis of Fig 6, error bars are needed. At the engine speeds of 7750 and 10750 rpm, the data points for all the four conditions are very close to each other. Can the authors explain the reason for such behavior at these two engine speed levels?

Reviewer 5:

This paper is focusing on the effect of velocity stack geometry on performance of a 150 cc-four stroke motorcycle. Basically, focus on changes in terms of mouth-ring radius of one inlet of air flow system to its performances.
Required Revisions
Methodology
2.2. Flow bench test
- the author should explain in detail the procedure/process and data taken to get the air flow rate. (Significant statement: line 117, Figure 5 shows an effect of velocity stack geometry on air flow rate entering the velocity stack during flow bench test.).
-What is the measuring apparatus used in this experiment (name, brand name, etc.). What is the uncertainty of each apparatus (static and dynamic).
3. Result and Discussion
- Uncertainty. The authors did not mention the sensors/measuring apparatus uncertainty or carried out any further calculation related to flow variables. Also, the authors did not mention the number of tests performed per each condition/parameters changed.
-The result and conclusion of this experiment based on the result captured in this experiment only and cannot be concluded as universal if there is no uncertainty analysis (static and dynamic) on this study.

Minor
Line 43. Typo. It was t was verified that the…
Line 49. …engine RPM. Please use correct terms, e.g., engine revolution.
Line 42, 48, 49. Every abbreviation has to explained in the first time appearance in the paper. E.g., RPM (Round per Revolution), ABS (Acrylonitrile butadiene styrene), etc. please check the whole paper.
Line 111. …volumetric fuel consumption…. Full stop?
Line 166. Full stop?

There is additional documentation related to this decision letter. To access the file(s), please click the link below. You may also login to the system and click the 'View Attachments' link in the Action column.
View Attachments

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2 attachments

comment reviewer 3.pdf
821K

PAPER REVISING FORM (First review).doc
45K

Anak Agung <agung589e@akprind.ac.id>

Your Submission - [EMID:62674f95cc0d08f7]

Anak Agung <agung589e@akprind.ac.id> Mon, Apr 4, 2022 at 11:53 AM
To: EASR <kku.enjournal@gmail.com>

Sujin Bureerat
Editor
Engineering and Applied Science Research

Dear Editor,
Thank you very much for the comment, revision, and suggestion
I have revised the manuscript according to Editor's and Reviewer's comment. The revision to the comment of Reviewer 2 is colored in Yellow, Reviewer 3 in Blue, and Reviewer 5 in Dark Red in Revised Manuscript. I have also proof read the manuscript to enhance the language. The detail responses are as in **PAPER REVISING FORM (First review).** Thank you very much for your consideration and help. Herewith, I also send you the dokumen

Sincerely yours
Dr. A.A.P. Susastriawan
[Quoted text hidden]

5 attachments

Certificate of Proofreading EASR-D-22-00006.pdf
132K

PAPER REVISING FORM (First review).doc
124K

R#1 Full Manuscript With Highlight.docx
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R#1full revised manuscripts with track change proof read).docx
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R#1 Blind Reviewer with highlight.docx
985K

Detail Response to Editor's and Reviewer's Comments

Ref.: Ms. No. EASR-D-22-00006
Article Title: **"An effect of velocity stack geometry on performance of a 150 cc-four stroke motorcycle"**
Engineering and Applied Science Research

Dear Editor and Reviewer
Thank you very much for the comment, revision, and suggestion
I have revised the manuscript according to Editor's and Reviewer's comment. The revision to the comment of Reviewer 2 is colored in Yellow, Reviewer 3 in Blue, and Reviewer 5 in Dark Red in Revised Manuscript. I have also proof read the manuscript to enhance the language. The detail responses are as in **PAPER REVISING FORM (First review)**

Reviewer 2:
Comment:

1. The manuscript titled "An effect of velocity stack geometry on performance of a 150 cc-four stroke motorcycle" is written without any clarity and novelty.
   The does not have sufficient content and poor language.

2. The manuscript has been proof read to revise the grammatical error and enhance language quality. The proof read certificate is attached in the last page of this form.

Response:

1. I have made clearer the novelty in last paragraph of introduction section. The additional sentences are as follow

   …..…….Velocity stack is been attached on air intake system of a motorcycle. It is believed that the used of velocity stack able to increase performance of the engine. However, the comprehensive discussion of an effect of the velocity stack's geometry is unavailable so far. Thus, novelty of the present work is to investigate an effect of velocity stack geometry on performance of a 150 cc-four stroke motorcycle in terms of torque, power, and specific fuel consumption.

2. The manuscript has been proof read to revise the grammatical error and enhance language quality. The proof read certificate is attached in the last page of this form

Reviewer 3:
Comment:

1. There are some grammatical errors in the manuscript that have been mentioned in the comments of the attached pdf file. Please make these corrections.

Response:
Thank you very much for the correction. The manuscript has been proof read to revise the grammatical error and enhance language quality. The proof read certificate is attached in the last page of this form.

Also, the following modifications and clarifications should be implemented in the manuscript before consideration for publication:

2. Section 3.1. line 121.
   These changes indicate that flow rates "slightly" increase with increasing fillet radius. Error bars are needed to see whether these changes are significant or not.

   Response:
   I have revised the graph of Figure 5 with the graph with error bar. The discussion has been also revised in last sentence of paragraph 3.1. Air flow rate
   ……..Thus, it can be stated that the use of velocity stack is able to increase air flow rate about 13.3%. However, the air flow rate changes insignificantly when the radius of the stack alters.

3. Section 3.2. line 136
   What is the lambda values corresponding to the air flow rates reported for No VS, VS5, VS15 and VS25? The extent of change in lambda should be given so that the combustion efficiency can be analyzed more accurately.

   Response:
   I have added this revision in section 3.2. The revision is as follow
   ….In the present work, the air-fuel equivalence ratio (λ) are 0.68, 0.76, 0.79, and 0.88 for No VS, VS5, VS15, and VS25, respectively. Those λ values indicate that the use of VS15 produces the leaner air-fuel mixture entering the combustion chamber….

4. Section 3.2. line 140
   In order to present more accurate analysis of Fig 6, error bars are needed. At the engine speeds of 7750 and 10750 rpm, the data points for all the four conditions are very close to each other. Can the authors explain the reason for such behavior at these two engine speed levels?

   Response:
   The graph of Figure 6 has been replaced by the graph with error bar. The output power for all the four conditions are engine are very close to each other at engine speed 7750 rpm and 10750 rpm. This may due to unstable combustion occurs at various engine speed condition I have added this discussion in section 3.2. Output power

Reviewer 5:

Comment:

This paper is focusing on the effect of velocity stack geometry on performance of a 150 cc-four stroke motorcycle. Basically, focus on changes in terms of mouth-ring radius of one inlet of air flow system to its performances.

Required Revisions

1. Methodology

   2.2. Flow bench test

   - The author should explain in detail the procedure/process and data taken to get the air flow rate. (Significant statement: line 117, Figure 5 shows an effect of velocity stack geometry on air flow rate entering the velocity stack during flow bench test.).
   - What is the measuring apparatus used in this experiment (name, brand name, etc.). What is the uncertainty of each apparatus (static and dynamic).

   Response:

   I have added the testing procedure, the flow bench specification, and uncertainty reading of the measurement devices used in Section 2.2. The revision is as follows

   …….. The bench used is SF-110 series from Superfow Technologies Group. The bench consists of an air pump, a u-tube and inclined manometers, and thermometer. The test procedure is as follows; 1) place the velocity stack in the test places; 2) switch ON the air pump to create vacuum in the plenum, thus ambient air enter the velocity stack; 4) read and collect the data of air pressure from a u-tube manometer and air flow rate from inclined manometer. The uncertainty reading of the manometer is ±1% full scale repeatability ± 0.5%. For each sample, the test is performed 5 time and the result is presented and analyzed in average value

2. Result and Discussion

   - Uncertainty. The authors did not mention the sensors/measuring apparatus uncertainty or carried out any further calculation related to flow variables. Also, the authors did not mention the number of tests performed per each condition/parameters changed.
   - The result and conclusion of this experiment based on the result captured in this experiment only and cannot be concluded as universal if there is no uncertainty analysis (static and dynamic) on this study.

   Response:

   - I have added a number of tests for each sample in last paragraph of Section 2.2 as

     …… For each sample, the test is performed 5 time and the result is presented and analyzed in average value

   - In order make more general conclusion, I have compared the result of power output with the work performance by Reddy et al in Result and Discussion Section. The additional discussion is

….. The comparable result was also obtained by Reddy *et al*. [7] whose obtained a convergent inlet manifold has higher mechanical efficiency about 3.15% than normal inlet manifold

3. **Minor**

Line 43. Typo. It was t was verified that the…

Line 49. …engine RPM. Please use correct terms, e.g., engine revolution.

Line 42, 48, 49. Every abbreviation has to be explained in the first time appearance in the paper. E.g., RPM (Round per Revolution), ABS (Acrylonitrile butadiene styrene), etc. please check the whole paper.

Line 111. …volumetric fuel consumption…. Full stop?

Line 166. Full stop?

Response:

The sentence in line 43 has been revised. Whole abbreviations used have been explained in the revision manuscripts, such as in line 48, 49. 49, etc. The sign of full stop has been added.

Certificate of Proofreading

This document certifies that the manuscript was edited for proper English language, grammar, punctuation, spelling, and overall style by one or more of the highly qualified native English speaking editors at Good Lingua Center of Education (GLCE)

Manuscript Title

Effect of Velocity Stack Geometry on the Performance of 150 cc-four Stroke Motorcycles

Author(s)

I.G.G. Badrawada, A.A.P. Susastriawan, Yoga Pradipta

Date Issued

April 4, 2022

GoodLingua
Translation, editing, and proofreading

PT. Internasional Translasi Edukasi, Jakarta

Anak Agung <agung589e@akprind.ac.id>

Your Submission - [EMID:cbb77794b87e1dba]

EASR <em@editorialmanager.com> Tue, Apr 26, 2022 at 2:22 PM
Reply-To: EASR <kku.enjournal@gmail.com>
To: Anak Agung Putu Susastriawan <agung589e@akprind.ac.id>

Ref.: Ms. No. EASR-D-22-00006R1
Effect of Velocity Stack Geometry on the Performance of 150 cc-four Stroke Motorcycles
Engineering and Applied Science Research

Dear authors,

We have reached a decision regarding your submission to Engineering and Applied Science Research, "Effect of Velocity Stack Geometry on the Performance of 150 cc-four Stroke Motorcycles".

Our decision is to: The paper can be accepted for publication in Engineering and Applied Science Research.

The acceptance date of your paper is April 26, 2022.

Thank you for submitting your work to Engineering and Applied Science Research.

Yours sincerely,
Editorial Office
Engineering and Applied Science Research
Faculty of Engineering,
Khon Kaen University, 40002 Thailand
kku.enjournal@gmail.com

Anak Agung <agung589e@akprind.ac.id>

[EASR] Please check your articles before published

Enjournal Kku <kku.enjournal@gmail.com> Thu, May 5, 2022 at 2:37 PM
To: Anak Agung <agung589E@akprind.ac.id>

Dear Author,

Your accepted manuscript entitled "**Effect of velocity stack geometry on the performance of 150 cc-four stroke motorcycles**" will be published in Engineering and Applied Science Research, **In progress: Vol. 49, No.4, year 2022**. The format of your manuscript has been adjusted according to the journal's specific formatting (new format). Please check your articles before publishing.

If you have any corrections, please highlight and comment in the PDF file.

Please return the final version of your manuscript by **May 7, 2022.**

Best Regards,
Editorial Team
Engineering and Applied Science Research
Faculty of Engineering,
Khon Kaen University, 40002 Thailand
kku.enjournal@gmail.com

12-31-22.pdf
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