



SDI Review Form 1.6

Journal Name:	Advances in Research
Manuscript Number:	2015_AIR_18480
Title of the Manuscript:	A MODEL FOR CALCULATING THE MACHINING TIME OF A LASER CUTTING MACHINE
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	<p>The authors in the article tried to design a model for calculating time of laser machine during the cutting operation.</p> <p>The theoretical background and the principles of the laser cutting technology are processed sufficiently. On the other hand, the authors did not consider any technological conditions at the model designing, they deal only with the specification of cutting time, but it relates with kinematics. So in my opinion, authors should be more focussed on this field. It would help them to utilize better expressions and relevant kinematic equations.</p> <p>I am not sure what is new in the article, what is the scientific research. (?) Authors compute the time based on the rules that are generally given. Also the characteristics of stepper motor for specific machine are usually known or adjustable (they are usually given by the producer). If they are unknown, I can understand that it is necessary to identify them and (as author correctly noticed) these characteristics are constant. But next measures, at the same settings, have to follow the given conditions. Then the measured values of cutting time depend only on the precision of the measurements and they have to be in accordance with the calculations.</p> <p>I would understand to the reasons of presented "research", if the goal of authors would be the verification of accuracy of the stepper motor after its</p>	<p>The scope of this work does not cover kinematics of the machine since the authors are considering an existing machine; this is why the resolution of the stepper motors used were determined.</p> <p>The laser machine HG LCY 300 used in this research could not predict the cutting time before cutting process starts; we only know the cutting time after the completion of the job. The authors, therefore, wants a model that would be able to predict the cutting time before the process of cutting begins. This research work is embarked upon at the request of our clients.</p> <p>Verification of the accuracy of the stepper motor is not the goal of the authors.</p>



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	<p>long life time. But the article conceived in this way seems to be as a laboratory report (in addition if so simple shapes of the samples are used for verification).</p> <p>I would recommend to the authors to rewrite the article with higher scientific erudition.</p>	Noted.
<u>Minor</u> REVISION comments	<p>There are some formal mistakes that should be also eliminated:</p> <ul style="list-style-type: none"> - row 42 - in my opinion, the comma should be after the word "parts", - row 59 - I think that "are" or "were" should followed the word "gas", - rows 68-69 - the sentence: "A relationship ..." is little bit confused, -row 81 (149)- a blank space in front of the word "Therefore (Since)" is missing, - row 151 - the expression "it be written" is not correct, ... 	<p>Row 42 has been corrected.</p> <p>"Assist gas" is a compound word; are or were might not be appropriate.</p> <p>By "A relationship...." We mean a formula is established.</p> <p>Ok.</p>
<u>Optional/General</u> comments		