

Review Form 3

Journal Name:	Advances in Research
Manuscript Number:	Ms_AIR_123194
Title of the Manuscript:	MATLAB combined with APDL simulation -- taking Y-shaped steel turnout pipe as an example
Type of the Article	Opinion Article

General guidelines for the 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 guidelines for the Peer Review process, reviewers are requested to visit this link:

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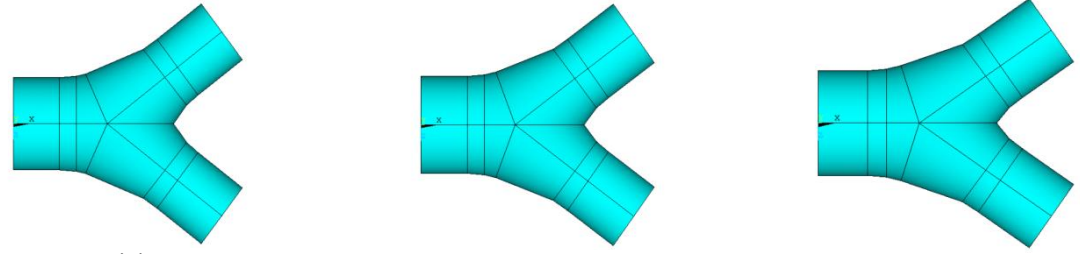
Benefits for Reviewers: <https://r1.reviewerhub.org/benefits-for-reviewers>

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</p>	<p>Manuscript provides an approach to development of integration of APDL text command files into MATLAB programming techniques. The paper can be published with some changes.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>Title of the article is suitable, but please revise for a better communication and alternative titles could be: APDL analysis combined with MATLAB techniques – for a Y-shaped steel turnout pipe as an example or APDL analysis combined with MATLAB techniques – example for a Y-shaped steel bifurcation</p>	
<p>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</p>	<p>At keywords: consider change to APDL Finite Element Analysis combined with MATLAB simulation</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>In a general approach, subsections of an article could follow the following structure: 1. Introduction and review 2. Materials and methods 3. Results and discussions 4. Conclusion 5. References Please consider renaming of subsection in order to follow this general structure.</p>	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>At Figure 1, please make the image larger in order to see some of an APDL or MATLAB command lines.</p> <p>For Q690 steel – please consider providing info: reference standard (Chinese Grade), type of steel (HSSS - high strength structural steel).</p> <p>At subsection 4. Joint analysis of MATLAB and APDL, in paragraph: ..., and then APDL calls the input files to complete a series of procedures such as modeling, grid division, and load application ... - Change grid division to mesh creation.</p> <p>An important information that is missing relates to the type of finite element used in meshing of the model.</p> <p>Also, in order to facilitate understanding of the model dimension it is better to put all dimensions in the form of a table and also to provide reference between this table and a schematic drawing of the model. According to the size, the initial grid number of each area is determined to be 5. Try rephrasing to: According to the mesh size and model dimension, the initial number of grids of each area is determined to be 5.</p> <p>... the relationship between the maximum stress and the number of grids is obtained. Please change number of grids to mesh size.</p> <p>... are summarized into the following table. In order to avoid confusion please do not use the following table but provide the reference number of table – ... data are summarized into the table 1. The same consideration applies to figures.</p> <p>The following is the model of the steel fork pipe under different division angles, from left to right, respectively, when the division angle is 80°, 75°, 70°</p> <p>To avoid confusion, please consider naming of images with letters (a), (b), (c). Are all three images the same one? Use only one expression: partition angle or division angle; steel fork pipe or steel turnout pipe or steel bifurcation.</p>	

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	 <p>(a) (b) (c)</p> <p>Figure 3 Models of Y-shaped steel bifurcations with different division angles (a) 80°, (b) 75°, (c) 70°.</p> <p>Draw the above table as an image in MATLAB to get the following line chart. Consider rephrasing to: Represent the table no 1 as an image in MATLAB to get the line chart from figure 5.</p> <p>There is no comparison between the results obtained by this method to an analytical or to an experimental method, just to prove similar or different results.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>Please insert in text, where is required, references number in brackets [], not only a simple list of references. Please order list of references usually in order of citation in text or another way as requested (alphabetical or date of publication).</p>	
<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>At subsection 2.1 Preparing for model parameterization Creation, consider change of title to: Creating Parametric Model Please consider capitalization of each word from titles of subsection. Correct the typing input where required in order to avoid overlapping of words: created,After, stress:The, obtained.The, etc.</p>	
<p>Optional/General comments</p>	<p>For Finite Element Analysis an acronym may be used: FEA</p>	

PART 2:

	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)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

Reviewer Details:

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