

Journal Name:	Asian Journal of Pure and Applied Mathematics
Manuscript Number:	Ms_AJPAM_1746
Title of the Manuscript:	DEFORMATION OF INTERNALLY PRESSURIZED HOLLOW CYLINDER OF A VULCANIZED RUBBER MATERIAL.
Type of the Article	

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>
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.	This manuscript is valuable because it gives a clear model for understanding how vulcanized rubber cylinders deform under internal pressure—useful in industries that rely on rubber components, like hoses or seals. The use of the D-operator method to find exact solutions for stress and displacement makes it a helpful reference for researchers and engineers working with rubber materials. One small downside is that a brief mention of the model's limitations in real-world cases with complex stresses could improve its practical relevance.	Noted
Is the title of the article suitable? (If not please suggest an alternative title)	Its mostly suitable. However, I suggest: <i>"Deformation Analysis of Internally Pressurized Vulcanized Rubber Cylinders Using the D-Operator Method"</i> This title keeps it clear and straightforward while emphasizing both the material and method used in the study.	Noted
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.	The abstract covers the core elements but as mentioned earlier, it would benefit from mentioning specific boundary conditions applied, as well as a brief note on the implications of the findings. Adding this would clarify the scope and underline the practical importance for engineering applications.	Noted
Are subsections and structure of the manuscript appropriate?	The structure of the manuscript is clear, with a logical progression from the theoretical background to the calculations and results. However, the section where the deformation equations transition into the equilibrium equations could benefit from more explanation. This would help readers follow the steps more easily as the equations are developed.	Noted
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.	The derivations in the paper are well done, using the D-operator method effectively to solve the differential equations for stress and displacement in the cylinder. This method matches well with what we'd expect from compressible materials like rubber under pressure. The solutions and the boundary conditions chosen are suitable, making these findings useful for real-world engineering situations that involve rubber materials.	Noted
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. =	The references in the paper are well-selected which support the analysis effectively.	Noted

Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	The language in the manuscript is sufficient and effectively communicates the technical content to its intended audience.	Noted
Optional/General comments	Contents seems original and appropriately cited.	Noted

PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
Are there ethical issues in this manuscript?	<u><i>(If yes, Kindly please write down the ethical issues here in details)</i></u>	