

Announcement Master's Thesis

Experimental Study on Washing Machine Walking Behavior

New-generation washing machines can operate at faster speeds with higher load capacity. However, due to incorrect loading or design errors, these machines may move, especially if the proper contact conditions between the machine foot and the surface are not met. To prevent this undesirable movement, the contact between the foot and the surface must be accurately and precisely analyzed, and this local contact model must be integrated into the multibody dynamic models in which the whole machine is simulated. The model can be improved by performing the necessary tests to verify the previously developed dynamic model and comparing the test results with the simulation results.



What is expected to be done in this study?

- Preparation of the washing machine experimental setup
- Performing the experiments under varying loading conditions
- Applying observed walking conditions to the MSC Adams multibody dynamics model
- Comparing experimental findings with simulation results
- Making necessary improvements to the local foot model in the MSC Adams model as needed

Your profile:

- Good knowledge of the basics of mechanics and measurement techniques
- Good programming skills in MSC Adams or having a high motivation to learn it
- Independence, a high level of motivation and problem-solving skills

Financial support will be provided within the study.

If you are interested in working on this master's thesis with us and would like to join our team, please contact us by sending a short email.

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