



Vibration of Nuclear Fuel Assemblies

By Hlavac, Zdenek / Zeman, Vladimir

Condition: New. Publisher/Verlag: LAP Lambert Academic Publishing | Modelling, Methods, Application | Vibrational analysis of nuclear fuel assemblies can be used for calculation of their expected lifetime period in term of abrasion of fuel rod coating. This monograph involves analytical methods for the fuel assembly modelling, calculation of modal values, sensitivity analysis of fuel assembly eigenfrequencies with respect to design and operational parameters and dynamic load calculation caused by spatial motion of the fuel assembly supporting plates in reactor core. The approach to modelling of vibrations is based on the fuel assembly decomposition into subsystems and on modal synthesis method with reduction of DOF number. The work of the friction forces in the contact lines of the fuel rods with space grid cells can be used for an assessment of fuel rod coating abrasion. The monograph addresses both practitioners working in the field of nuclear power engineering and graduate and postgraduate students in mechanical engineering and applied mechanics oriented on dynamics of large mechanical structures. | Format: Paperback | Language/Sprache: english | 88 pp.



READ ONLINE
[2.57 MB]

Reviews

This created publication is wonderful. it absolutely was writtern extremely completely and beneficial. I discovered this publication from my dad and i encouraged this publication to discover.

-- **Kristina Kshlerin DDS**

Basically no words to describe. We have read through and i also am sure that i am going to going to read once more once again later on. You may like just how the article writer compose this publication.

-- **Mrs. Jane Quitzon DDS**