

Accepted Manuscript

Transverse vibration and instability of axially travelling web subjected to non-homogeneous tension

Liang Ma , Jiankui Chen , Wei Tang , Zhouping Yin

PII: S0020-7403(17)31348-6
DOI: [10.1016/j.ijmecsci.2017.09.047](https://doi.org/10.1016/j.ijmecsci.2017.09.047)
Reference: MS 3958



To appear in: *International Journal of Mechanical Sciences*

Received date: 22 May 2017
Revised date: 19 September 2017
Accepted date: 25 September 2017

Please cite this article as: Liang Ma , Jiankui Chen , Wei Tang , Zhouping Yin , Transverse vibration and instability of axially travelling web subjected to non-homogeneous tension, *International Journal of Mechanical Sciences* (2017), doi: [10.1016/j.ijmecsci.2017.09.047](https://doi.org/10.1016/j.ijmecsci.2017.09.047)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- The travelling web subjected to parabolic tension profile is investigated.
- The critical velocities may be greatly decreased because of the tension inhomogeneity.
- A small tension inhomogeneity is enough to change the mode shapes completely.
- The web with larger aspect ratio or higher average tension is more sensitive to the tension inhomogeneity.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/5016053>

Download Persian Version:

<https://daneshyari.com/article/5016053>

[Daneshyari.com](https://daneshyari.com)