

Accepted Manuscript

Stretch bending and springback of profile in the loading method of prebending and tension

Ruixue Zhaia , Xuehui Dinga , Shuman Yu , Chunge Wang

PII: S0020-7403(18)30649-0
DOI: [10.1016/j.ijmecsci.2018.06.028](https://doi.org/10.1016/j.ijmecsci.2018.06.028)
Reference: MS 4397



To appear in: *International Journal of Mechanical Sciences*

Received date: 28 February 2018
Revised date: 1 June 2018
Accepted date: 18 June 2018

Please cite this article as: Ruixue Zhaia , Xuehui Dinga , Shuman Yu , Chunge Wang , Stretch bending and springback of profile in the loading method of prebending and tension, *International Journal of Mechanical Sciences* (2018), doi: [10.1016/j.ijmecsci.2018.06.028](https://doi.org/10.1016/j.ijmecsci.2018.06.028)

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 mechanical model of any cross-section profiles in the loading method of prebending-tension is established.
- The springback analysis step for the stretch bending of profiles under arbitrary bending radius and tension is determined.
- The stretch bending experiments and simulations of the rectangular and U-section profiles are carried out, and the reliability of the analytical model is verified.

Download English Version:

<https://daneshyari.com/en/article/7173650>

Download Persian Version:

<https://daneshyari.com/article/7173650>

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