

Comparative Study of Static and Dynamic Bending Forces during 3-Roller Cone Frustum Bending Process

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Abstract : 3-roller conical bending process is widely used in the industries for manufacturing of conical sections and shells. It involves static as well dynamic bending stages. Analytical models for prediction of bending force during static as well as dynamic bending stage are available in the literature. In this paper, bending forces required for static bending stage and dynamic bending stages have been compared using the analytical models. It is concluded that force required for dynamic bending is very less as compared to the bending force required during the static bending stage.

Keywords : analytical modeling, cone frustum, dynamic bending, static bending

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