

VIBRATION AMPLITUDE AS A FUNCTION OF FILLING RATIO AND DIMENSIONS OF BALLS MILLS

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Abstract: This paper wants to demonstrate how is possible, by three model approach for the movement of grinding in vibrating ball mills to design of the vibrating ball mills . With three model mechanic approach can be determined vibration amplitude A as a function of filling ratio η , for different dimension of grinding chamber D and L , and the filling ratio of grinding elements . These models are: *Mechanic Model nr.1*, of “dividing mass in tow cylinder” ; *Mechanic Model nr.2*, of “dividing mass in tow half cylinder” ; *Mechanic Model nr.3*, of “divided mass in n barr”. After applied these tree model approach for the movement we obtain the conclusions about the influence of filling ratio and dimensions of ball mill of vibration amplitude.

Key words: operating range, grinding elements, vibrating amplitude