"PERFORMANCE OF A VIBRATORY CONVEYOR"

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ABSTRACT

A small vibratory conveyor of the variable reaction type is constructed. Provision is made for the variation and measurement of amplitude of vibration, frequency of vibration and the angle of the supporting links. The mean velocity of a small cement block is measured for a series of values of the above parameters.

A theoretical analysis of the vibratory cycle is carried out and theoretical values of mean velocity are computed and compared with the experimental values.

Further experimental work is carried out using dry sand fed from a hopper in the place of the cement block. The velocity is again measured in relation to the discharge and the thickness of sand on the trough.

General conclusions are drawn regarding the operation of the conveyor and suggestions for further work are put forward.

ACKNOWLEDGEMENTS

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