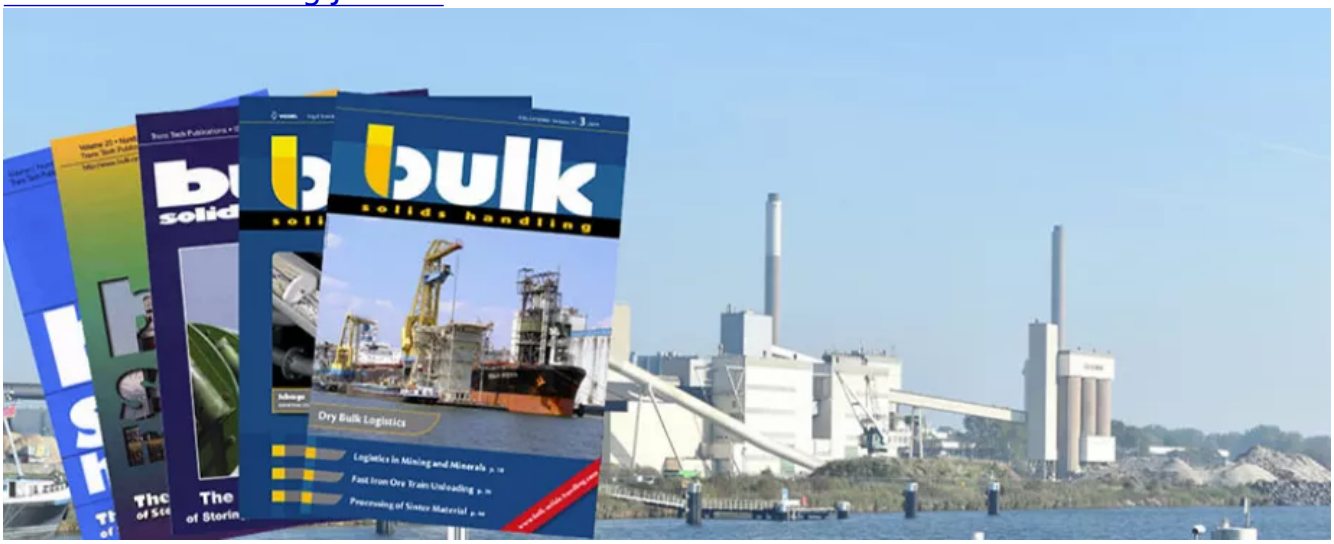
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Forschungsbeitrag

Research on the Flow Behaviour of Bulk Materials at the University Essen

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Teaching and research in materials handling department at the University of Essen concentrate on continuous conveyor systems and, within this category, more particularly on the mechanical handling of bulk materials and unit loads. In addition, storage technology for bulk materials is studied. In connection with material flow engineering problems, special interest is focused on a closed-circuit bulk handling installation which has been constructed for carrying out a research project promoted by the Ministry for Science and Researches of the Federal German State of Nordrhein-Westfahlen.

The object of this project is to determine, by means of theoretical and experimental investigations, the precise conditions of centrifugal discharge of bucket elevators. Further aims are to develop forms of elevator bucket of the basis of the result obtained and, alternatively, to test known bucket designs with regard to their fatigue strength. In addition, the validity of the currently applied design principles for bucket elevators is to be verified.