

Water Economy in Mineral Processing through Dewatering Processes

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Abstract

Water is highly precious for our socio-economic development. India has already entered into water scarcity zone of the world. India's growing industries are facing more and more water crunch. The mineral processing industries where water is an essential raw material, has to economize the water consumption for its sustainable development. In this context it is essential to conserve and recycle the water through dewatering processes in our mineral processing units. In this paper various processes to recover the waste water from the beneficiated minerals and replacing the fresh water with these have been described and discussed. The processes include sedimentation, filtration and centrifuge. Various technological developments and equipments used in these processes have been incorporated in the paper. The merits and demerits of various dewatering equipments have been highlighted.