
Dusting and caking tendencies in decarbonated glass batches

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Abstract

Decarbonation of glass batches for an environmentally friendly glass production are being examined in an on-going research project funded by the German Federal Environmental Foundation. The decarbonation of glass batches could be realized by exchanging carbonated raw materials with adequate substitutes as suppliers of the respective oxides. However, such substitutes are considered to have specific mechanical engineering challenges like dusting and caking. Therefore, to evaluate the industrial practicability of the substitutes, process engineering measurements are performed on decarbonated glass batches, testing influencing factors like moisture content, temperature, and storage time. The measurement methods and first results are being presented.

Keywords: dusting, caking, decarbonated batch

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