
Investigations on different fractions of cullet for glass recycling

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Abstract

Cullet is becoming an increasingly important raw material not only for the container glass industry. The use of recycled glass is also growing in the production of float glass. Their use minimizes CO₂ emissions and reduces the energy needed to melt the batch. An increase of the cullet content by 10 % minimizes the energy demand for melting by about 3 %. In addition, more and more complex legal requirements of the circular economy must be maintained.

The sorting efficiency of cullet processing plants is improving all the time. The economic efficiency of sorting is now also advancing for smaller parts. However, its use in glass production still offers challenges.

The AiF-IGF research project 22607 N "MaxScherben" is concerned with maximizing the amount of cullet available for glass production. The intention is to increase the volume of recycled glass that is passed on to the recycling.

Initial investigations are characterizing cullet fractions smaller than 5 mm. Grain size, grain size distribution and impurities will be investigated and the influence on glass production processes will be discussed.

First results are presented in this poster.

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