

The Use of Cement Dust in the Glass Industry

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Abstract : In the case of waste glass cullet, a fully functioning recycling system for individual glass industries was developed, while recycling of cement dust encounters a number of difficulties and is conducted to a limited extent in the packaging and flat glass industry. The aim of the project was to examine the possibility of using dust arising in cement plants in the process of melting various types of glasses. Dust management has a positive effect on the aspect of environmental protection and ecology. Sets have been designed, and the parameters of the melting process have been optimized. Glasses were obtained with the addition of selected cement dust on a laboratory scale, using DTA, XRD, SEM tests, and a gradient furnace was conducted to check the tendency to crystallization.

Keywords : cement dust, crystallization, glass, XRD, SEM

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