

## عنوان مقاله:

Investigating the effects of triethanolamine on clinker grindability with and without gypsum

## محل انتشار:

هفتمین کنگره ملی مهندسی شیمی (سال: 1390)

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## خلاصه مقاله:

In industrial Portland cement manufacturing process, use of mixtures of 95% clinker and 5% gypsum is usual. The aim of the present research work is evaluating the effects of triethanolamine as a grinding aid on Blaine specific surface area and fineness of clinker with and without gypsum in ball and vibrating disk mills. The results show that in both mills the presence of TEA results in higher specific surface area and less residue on sieve. Gypsum increases the Blaine specific surface area of clinker by 6% and at the same time results in an increase in residue on sieve in both mills. TEA increases the Blaine specific surface area of the clinker by 46 and 16% in ball and vibrating disk mills, respectively. In the presence of gypsum, TEA is again effective specially in ball mill. It increases the Blaine specific surface area of the mixtures of 95% clinker and 5% gypsum by 16 and 7.6% in ball and vibrating disk mills, respectively. In addition samples of ball mill have better particle size distribution compared to those ground in vibrating disk mill.

## کلمات کلیدی:

Grinding aid, Triethanolamine, Gypsum, Ball mill, Vibrating disk mill, Blaine

## لینک ثابت مقاله در پایگاه سیویلیکا:

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