



Application of the Rietveld method to the analysis of anhydrous cement

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ABSTRACT

X-ray powder diffraction allows direct measurement of the phase content in cement. More recently, whole pattern approaches such as the Rietveld method show an improvement in both within (repeatability) and between laboratory (reproducibility) precision. The aim of this paper is to discuss the influence of the different parameters involved in the Rietveld method and review the most recent quantitative X-ray powder diffraction studies on anhydrous cement. Comparisons with Bogue calculations, scanning electron microscopy and nuclear magnetic resonance are also discussed.

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