

AimSizer/LNO.0049

Superfine Grinding of Dolomite Powder in Wet Mode

Abstract: The superfine grinding parameters of dolomite in wet by a stirred mill was optimized. The optimal parameters of superfine grinding dolomite were determined. The results showed that the grinding agent was polyacrylate whose mass fraction was 0.5%, the slurry concentration was 60%, the mass ratio of ball and powder was 5:1, and the grinding time and rotation speed were 3-4 h and 1200 r/min, respectively. Under the optimal conditions, the particle size distribution of obtained dolomite powder was $d_{50}=0.70\mu\text{m}$ and $d_{97}=1.97\mu\text{m}$ when it was ground for 4 h.

Key words: dolomite; superfine grinding; wet grind; laser particle size analyzer; particle size analyzer; aimsizer; as-2011 micron laser particle size analyzer; as-2012 submicron laser particle size analyzer

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