

Influence of Wet-Milling on Physico-Chemical Properties of Fly Ash and Strength of Cement with Fly Ash

X. He^{1,2}, Y. Chen¹, Y. Su²

¹*China Building Materials Academy, Beijing, China;*

²*Hubei University of Technology, Wuhan, China*

Stirring mill is an effective method of grinding powder. Author tried to process industrial waste residue by means of wet milling with stirring mill and manufacture a kind of mineral admixture slurry. The paper aims at study of physico-chemical properties of fly ash treated by wet milling and strength of cement with fly ash. Results indicate wet milling can promote the conversion of fly ash from vitreous body to low polymer and improve the second hydration capability of fly ash. Results made by laser size-distribution analyzer show fly ash treated by wet-milling can improve the fill effect of cementitious materials. In addition, strength experiment results show the strength of cement with fly ash treated by dry milling and wet milling is higher than that of raw fly ash. Moreover, wet milling applies to super fine grinding of mineral admixture, which is very useful for the effective utilization of admixture effect.