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## Mechanical properties of cement paste containing iron powder

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### Abstract

This research project studied the mechanical properties of the iron paste containing metal powder. The amounts of the iron powder additives were 10, 20, 30, 40, 50, 60 and 70% by weight of cement. Water to cement ratio was controlled by measuring workability. The universal testing machine as used to measure mechanical property. Which showed that adding iron powder enhanced the compressive strength of the cement paste. The microstructure was studied by using a scanning electron microscope. The correlation between microstructure and strength was discussed.

Keywords: Cement paste; Iron powder; Compressive Strength

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