Modification of Thermal Shock Resistance of a Red Clay Body with the Addition of Quartz.

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Abstract

The study presented in this paper describes variation of thermal shock resistance of a red clay body with the addition of different percentages of quartz. This investigation was initiated to develop a glazed red clay cookware body with good thermal shock resistance. Quartz was incorporated in the red clay to control both thermal expansion and thermal shock resistance. The thermal shock resistance of red clay body was investigated with different proportions of quartz (10%, 20%, 30%, 35% and 40% quartz) at 1050^{0}C firing temperature.