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STUDY OF TEMPERATURE VARIATION IN A CONVENTIONAL BRICK KILN

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Handmade burnt clay bricks produced presently are generally of poor quality with respect to compressive strength, water absorption and dimensional accuracy. Underfiring of bricks is supposed to be the dominant factor contributive to the low compressive strength of handmade bricks. A scientific study has not yet been made to substantiate this hypothesis.

This investigation was aimed at ascertaining variation in firing temperature of a conventional brick kiln using pyrometric cones. Pyrometric cones indicative of temperatures ranging from 600°C - 900°C were placed in various locations in a segment (considered to be symmetrical) of a typical intermittent updraught kiln. The study revealed that, firing temperatures sufficient for strength development of bricks through sintering and vitrification could occur in this type of brick kiln.