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Experimental Study on Partial Replacement of Fine Aggregate by Lathe Steel Scrap in Concrete

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Abstract: *In this study we had did partial replacement of fine aggregate by metal steel scrap in different percentage in concrete. In this paper, M_{20} and M_{30} grade of concrete is used and lathe metal scrap used as a fiber and added up to 30% by weight, at a gap of 10% (i.e., 0%, 10%, 20%, and 30%). In this investigation, a comparison has been made between plain cement concrete and the fiber reinforced concrete containing lathe metal scrap (metal steel scrap) in various proportions by weight. Analytical comparison is being done between the compressive strength of plain cement concrete and Lathe metal scrap reinforced concrete (LMSRC) M_{20} and M_{30}. The 28 days strength of LMSRC for compressive strength is found to be increased when compared with the 28 days strength of plain cement concrete.*

Keywords: Lathe Machine Steel Scrap, Reuse, Compressive strength, Flexural strength, Split tensile strength Sustainability.

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