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# Utilization of Copper Slag to Enhance the Impact Strength of concrete

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**Abstract :** India is a fastest developing country, due to the increase in the growth of industry, the production of goods has been increased and at the same time the waste products coming out of these industries has considerably increased. From the study it was noted that disposal of these waste material has been a major problem and has created many environmental issues. One of such material is copper slag which has 42% to 65% of silica content. Since availability of river sand is decreasing day by day, copper slag can be used as a partial replacement of fine aggregate. Here in this experimental study, fine aggregate is replaced with 0%,10%,20%, 30%,40% & 50% of copper slag for M<sub>20</sub>, M<sub>30</sub>, M<sub>40</sub> & M<sub>50</sub> grade of concrete. Impact resistance of concrete was studied by Drop Weight Method. It was found that 20%-30% replacement of copper slag was found economical.

**Key words :** copper slag, impact strength, drop weight method, fine aggregate, grade of concrete.

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