

# Partial Replacement of Coarse Aggregate by Waste Tyre Rubber

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**Abstract:** *The waste-Tyre rubber create the significant environmental problems in worldwide. With the increase in the automobile production, large amounts of waste tyre is generated from it, and need to be disposed. Due the rapid depletion of available sites for waste disposal, many countries banned the disposal of waste tyre rubber in landfills so that Research had been in progress from long time to find alternatives to the waste tyre disposal. Non-biodegradable waste has become a big problem in the world in recent years. Increased consumption of materials such as plastic, rubber, and glass in domestic and industrial operations in quickly emerging countries such as India has impacted our daily lives. Our research focuses on how to correctly use waste Rubber as a Coarse Aggregate Replacement Material in Concrete while minimising the use of coarse aggregate. Among the all alternatives Utilization of waste-tyre rubber in as a partial replacement of coarse aggregate in different praportion is the best option. waste Tyre Rubber is light weight, elasticity energy absorption, and have sound and heat insulating properties so that it is used in construction sector. So that In this research, we are doing replacement of coarse aggregate by waste rubber tyre in 0%, 5%, 10%, 15%, 20% and then its compressive strength of its cube can be checked at 28 days. Ordinary Portland Cement (OPC) of 43 grade is taken and It can be help to environment to reduce pollution and also achieve Economy. In this project our main objective is to study the influence of partial replacement of coarse aggregate with waste tyre, and to compare it with the compressive strength of ordinary M25 concrete.*

**Keywords:** Compressive Strength, Waste tyre Rubber, light weight ,Energy absorption, Economy

