

## To Study the Effect of Optic Fibre Laser Cladding of Cast Iron with Silicon Carbide on Wear Rate

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**Abstract :** The study investigates the effect on wear rate of laser clad of cast iron with silicon carbide. Metal components fail their desired use because they wear, which causes them to lose their functionality. The laser has been used as a heating source to create a melt pool over the surface of cast iron, and then a layer of hard silicon carbide is deposited. Various combinations of power and feed rate of laser have experimented. A suitable range of laser processing parameters was identified. Wear resistance and wear rate properties were evaluated and the result showed that the wear resistance of the laser treated samples was exceptional to that of the untreated samples.

**Keywords :** laser clad, processing parameters, wear rate, wear resistance

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