PAPER ID:245

# TRIBOLOGICAL PERFORMANCE OF HEAT TREATED 0.6% C STEEL

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## ABSTRACT

The present work investigated the effect of heat treatment of tribological behaviour of 0.6% C steel. Samples were austenitized at 910˚C for 1hr in a muffle furnace and then cooling was done at different cooling rate, like furnace cooling (annealing), air cooling (normalizing) and quenching in water bath (quenching). Followed by microstructural characterization were carried out using optical microscopy and XRD analysis. Vickers hardness tester was used to evaluate hardness of the samples. Wear behavior of the as-received and heat treated samples were evaluated by Pin on Disc wear tester.

**Keywords:** 0.6% C steel, optical microscopy, XRD, Hardness, Wear