

Effect of Austenitization Temperature on Wear Behavior of Carbidic Austempered Ductile Iron (CADI)

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Abstract : Chromium bearing Austempered Ductile Iron (ADI) has been recently in the news for its improved wear performance over the ADI. The work presented below was taken up to study the effect of different austenitisation temperatures on the microstructure and wear performance of the Carbidic Austempered Ductile Iron (CADI). In this investigation Cr bearing ductile iron was subjected to austempering treatment to obtain an ausferritic microstructure. Two different austenitisation temperatures were selected whereas, the austempering temperature and time was kept unchanged. Microstructure and wear performance of this alloy, austenitized at two different temperatures was studied.

Keywords : austempered ductile iron, carbidic austempered ductile iron, austenitization temperature, wear behavior

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