

Current and Future of Research on Austempering Ductile Iron

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The Austempered Ductile Iron has the advantages of high specific strength, high stiffness, and high wear resistance. The excellent properties are achieved by the heat treatment process applied to the ductile cast iron. The chemical compositions of ductile cast iron and as-cast microstructure also play roles on the formation ausferrite, the mechanical properties and thus the processing window. Research on ADI development including both the alternative controlling austempering cycle and the addition of alloying elements. In this work, recent research on ADI have been reviewed and future research have been suggested.