(301-239) - Effect Of Heat Treatment On Microstructure And Mechanical Properties Of Ti-13Nb-13Zr Alloy Produced By Powder Metallurgy

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In this present work the effect of heat treatment on microstructure, elastic modulus and microhardness of Ti-13Nb-13Zr produced by powder metallurgy (PM) was studied using a temperature above β transus and different cooling rates - air, directed air flow, in furnace and water quenching. Microstructure and phases were analyzed employing scanning electron microscopy and X-ray diffraction. Elastic Modulus and microhardness were determined using a dynamic mechanical analyzer (DMA), and a Vickers microhardness tester.