

Review of: "Effect of ultrasonic surface deep rolling combined with oxygen boost diffusion treatment on fatigue properties of pure titanium"

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As fatigue failure is one of the main causes of material fracture in industrial applications, it is particularly important to improve the fatigue properties of pure titanium. In this paper, Ultrasonic surface deep rolling (USDR), oxygen boost diffusion (OBD), and their combination (USDR-OBD) were all used to improve the surface hardening of pure titanium. Results show that USDR treatment can improve the fatigue life of pure titanium, and the USDR-OBD series has a better hardening effect than the OBD series. The paper is innovative, logical and has good research value.