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## Review of Various Surface Treatment Techniques on Titanium Alloys and Their Protective Effects against Corrosion

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**Abstract** This paper attempts at a review of the recent developments on the improvement of surface corrosion in titanium alloys and composites by various surface treatment techniques. The surface treatment techniques include different types of laser surface coating, plasma enhanced vapour deposition, high intensity plasma beam coating, cathodic arc deposition and reactive magnetron sputtering. Also the effect of laser surface treatment on Ti-TiB composite and its corrosion resistance properties were reviewed. The possibility of laser surface modification of Ti-TiB composite surface for enhancement of corrosion properties was also reviewed and discussed.

**Keywords :** Titanium alloys and composites, corrosion, surface treatment, protective effect.

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