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**A Study on Tribological Behaviour of Thermally Sprayed Coatings**

Ashok kumar R.T, Nagendra I.J, Yuvaraj Naik

Assistant Professor, Dept. of Mechanical Engineering, Presidency University Bangalore

**Abstract**

The process of coating is used for modifying the surface properties such as corrosion, wear, and oxidation when the components are subjected to excessive heat load failure. Therefore it is necessary to select the coating material, and deposition becomes very important for any application. Coatings are significantly used on the metal substrate to protect from wear and friction. The tribological behavior of coating process depends on many parameters like, coating properties, metal substrate, interface, and running conditions. Hence selection of coating for tribological application is difficult process. Thermally sprayed WC, CRC based coatings are used in turbines for resistance to wear like abrasive, cavitation, erosion and corrosion. The Nicr-Al coating showed better protection to high-temp oxidation, corrosion due to generation of protective oxides. The alloy NiCrSiBc shows good balance with respect wear and corrosion resistance when subjected to high temp working atmosphere and chemically aggressive situation. The NiCrBSi coatings gives good surface finish and also good bonding interface. This article indicates the review related to selection of coating, powder, process of protective wear resistance of coating by thermal spray process. The significance of various spraying techniques and spraying parameters on the improvement of coating is different for every coating. The wear types, coating process types, powders, significantly plasma spray, and HVOF spray methods are discussed to identify the coating for particular application.

**Keywords:**

Tribological behavior, coating properties, metal substrate, interface, cavitation, erosion and corrosion.

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