

Cold Spray Fabrication of Coating for Highly Corrosive Environment

Authors : Harminder Singh

Abstract : Cold spray is a novel and emerging technology for the fabrication of coating. In this study, coating is successfully developed by this process on superalloy surface. The selected coating composition is already proved as corrosion resistant. The microstructure of the newly developed coating is examined by various characterization techniques, for testing its suitability for high temperature corrosive conditions of waste incinerator. The energy producing waste incinerators are still running at low efficiency, mainly due to their chlorine based highly corrosive conditions. The characterization results show that the developed cold sprayed coating structure is suitable for its further testing in highly aggressive conditions.

Keywords : coating, cold spray, corrosion, microstructure

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