

A brief introduction to electrospark deposition

Abstract

A general-level introduction to electrospark deposition (ESD) will be provided, covering the basics of how it works and the applications of ESD that have been researched at CAMJ. Included in this overview is a detailed look at the repair of a turbine/compressor blade having experienced various damage modes, the use of ESD coatings on resistance welding electrodes, and the use of ESD for surface alloying, among other applications. The purpose of this presentation is to familiarize the audience with the electrospark deposition process and some of its applications, so that audience members can identify potential applications of ESD in their own research.