

The Role and Impact of Cold Spray Technology on Surface Engineering

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Abstract : Studies show that, for viable product realisation and maintenance, a spectrum of novel processing technologies and materials to improve performance and reduce costs and environmental impact must constantly be addressed. One of these technologies, namely the cold spray process, has enabled a broad range of coatings and applications, including many that have not been previously possible or commercially practical, hence its potential for new aerospace, electronics, or medical applications. Therefore, the purpose of this paper is to summarise the state of the art of this technology alongside its theoretical and experimental studies, and explore the role and impact of cold spraying on surface engineering.

Keywords : surface engineering, cold spray, ageing aircrafts, corrosion, microchannels, maintenance

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