



Poster 1

## Novel galvanic coatings for ground support equipment



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*ABSTRACT:*

Hot Dipped Galvanising (HDG) is relatively expensive and time-consuming batch process for large Ground Support Equipment (GSE). The current work focuses on developing a lower-temperature alternative. The aim is to provide a corrosion-resistant coating that can bond with the substrate at lower temperatures, be applied onsite at the sponsor company facility and offer galvanic protection. The novel corrosion resistant coating is applied to the substrate at room temperature then cured at an intermediate temperature. The coating may also be used for repair of galvanised GSE, which often sees welded areas left susceptible to corrosive attack. Electrochemical studies and accelerated corrosion tests have shown that the coating offers excellent galvanic protection to steel in an electrolyte. Application and curing of the coating have been optimised for industrial use. The result is a robust, protective, and dynamic coating; a step forward in the fight against corrosion of steel and protection of HDG."



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