Environmental accounting: changing from zinc plating to organometallic coatings to enhance performance and to minimize emissions

J.F. Faro, Antonio José Monteiro Rodrigues, Biagio F. Giannetti, Cecília M. V. B. Almeida, Silvia H. Bonilla

Universidade Paulista, São Paulo, fernando_faro@hotmail.com

Abstract

This work evaluates the use of resources by two different surface finishing processes for metallic pieces, using environmental accounting. Organometallic finishing is gradually substituting the traditional electrolytic zinc finishing, as it improves corrosion resistance and diminishes effluent emission. Moreover, organometallic coatings do not use chromium in their composition. Results show that organometallic coatings are environmentally friendlier than zinc coatings.

Keywords: coating, zinc, organometallic, chromium, environmentally friendlier.