New Zinc Phosphate Treatment Technologies for Automotive in 21st Century

松下 忠、相島 敏行、鷲巣 正人、高梨 裕幸 ABSTRACT

Zinc phosphating is used around the world as a pre-treatment on auto bodies. Throughout the 20th century, the required corrosion resistance for auto bodies has been satisfied by the technologies used in body structure, substrate materials, zinc phosphating treatment, paint and subsidiary corrosion resistance materials, which are sealer, adhesive and wax etc. and zinc phosphating technology played the primary role in corrosion prevention. As we enter the 21st century, the social environment surrounding the automobile is undergoing a revolution as society becomes focused on the environmental impact of automobiles. Furthermore, demands for shorter processes and cost reductions continue to increase. In this paper, we introduce new zinc phosphate technology which satisfies the recent demands of auto makers and discuss the anticipated trends in zinc phosphating technology.