

6. New Dry-in-Place Type Lubrication Coating

中村 充、熊谷 学、古山 治

ABSTRACT

In recent years auto makers have increased the ratio of galvanized(GA) steel materials used however in the case of difficult-to-form parts they have been tending to conduct the lubricant treatment on the steel panel itself. Types of lubricant treatments available for GA steels include further iron plating on top of it's surface1), a reaction type prephosphate treatment in which a preparatory fine phosphate coating is formed on the plating and a non-water rinse type prephosphate treatment in which phosphate treatment is conducted without the water rinsing stage. However, the disadvantages of these lubricant treatments are that the iron plating is costly, and the reaction type prephosphate treatment requires investment in equipment, there is a variation in performance depending on plating type, and there are problems with waste water and its disposal. Furthermore, in the case of the non-water rinse type prephosphate there are some problems with compatibility with adhesive and phosphatability. In order to overcome these problems, we developed a roll-on type lubricant called LUBEX which requires a minimum of equipment investment, and displays excellent press-formability, compatibility with adhesives, and phosphatability. In this paper, we introduce the characteristics and performance of LUBEX.