

Development of New Conversion Coating System

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ABSTRACT

The zinc phosphating process has played an important role in improving the corrosion resistance of auto bodies. However, the zinc phosphating bath contains heavy metals ions and it can not avoid the sludge generation. As a result of our extensive research into conversion coatings we have succeeded in developing a completely new conversion coating system. The new conversion coating system uses completely different components to zinc phosphating and by comparison to zinc phosphating, the concentration of heavy metal ions is 70% lower and furthermore, no sludge is generated. The new conversion coating film is highly resistant to acids and alkalis. As a result the new conversion coating system achieves a very high corrosion resistance. In the near future, the new conversion coating system will replace zinc phosphating.