

Development of Zn-Ni Electroplated Steel Sheets "River Hi-Zinc" and "River Hi-Zinc Super"*1

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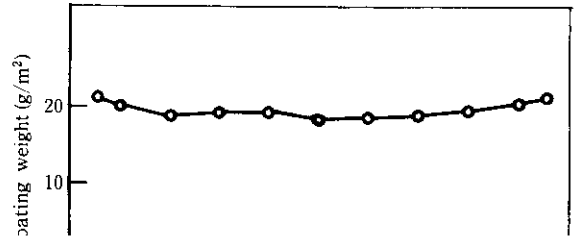
*1 The "River Hi-Zinc" Zn-Ni electroplated steel sheet **DIVED HI-ZINC** was developed to reduce the

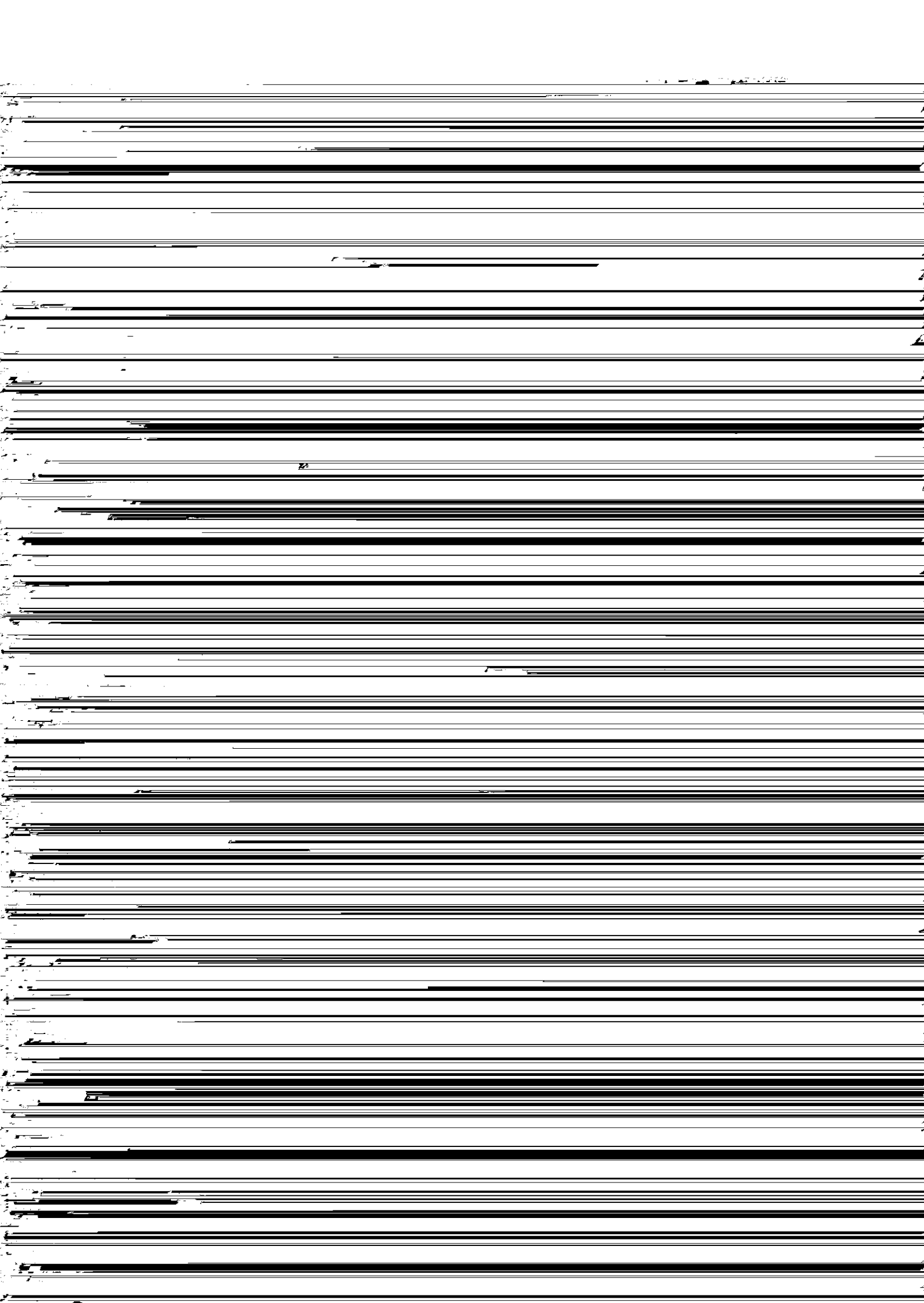
automobiles.

This report concerns the properties of these two newly developed steels.

2 Composition of RIVER HI-ZINC Coating Layer

To determine Ni content in the Zn-Ni alloy electroplated layer an examination was made of the effect on





12

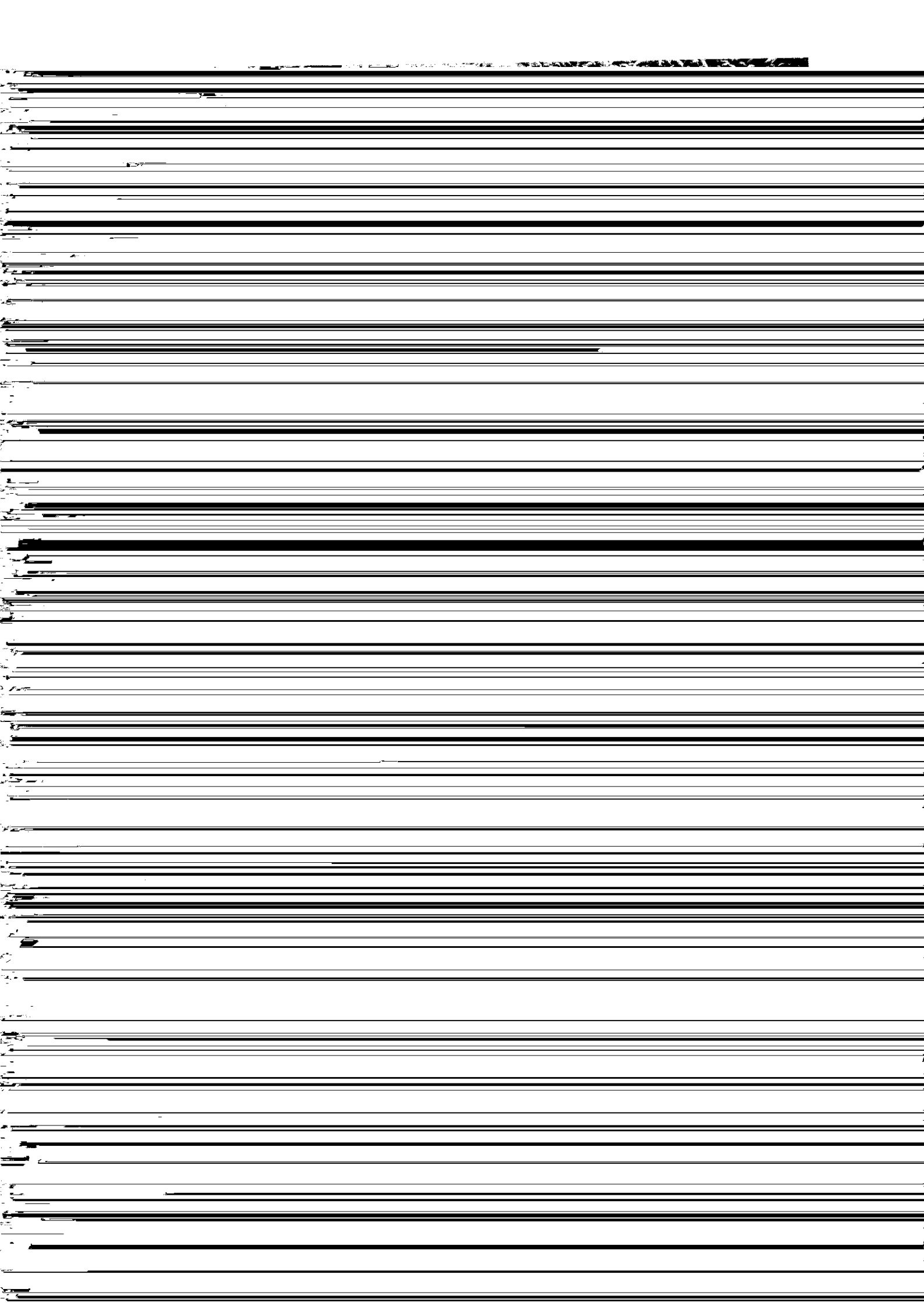
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do not readily form.

(2) The potential of the coated layer is less noble than

Scribed portion

non-scribed



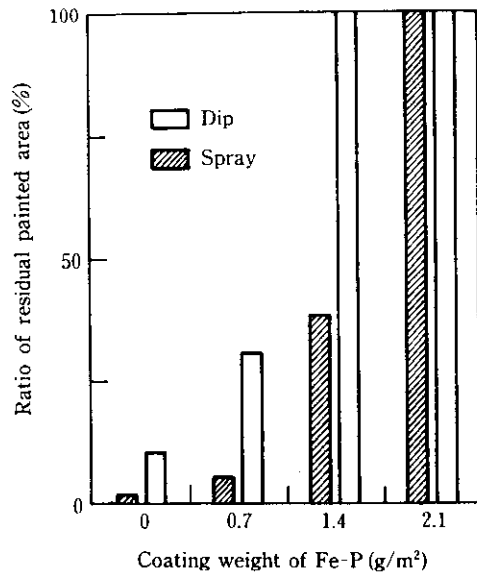
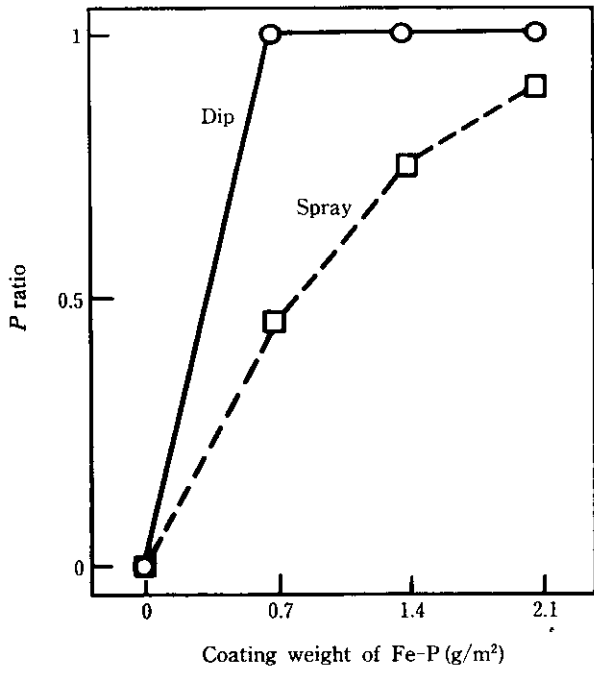
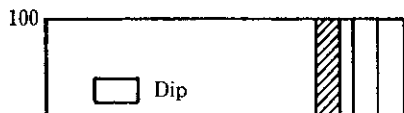
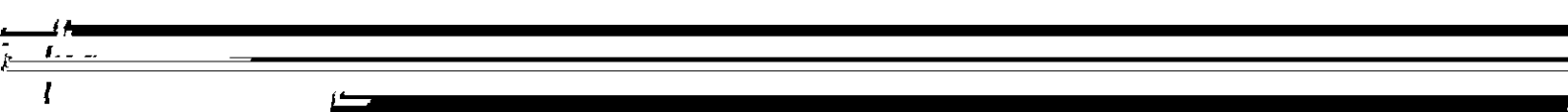
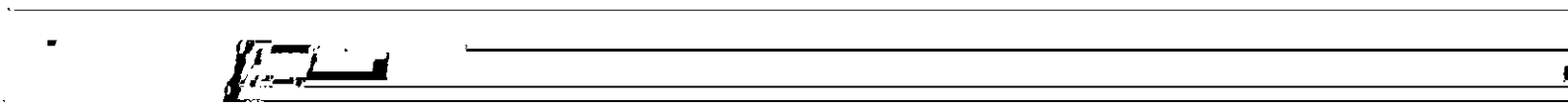
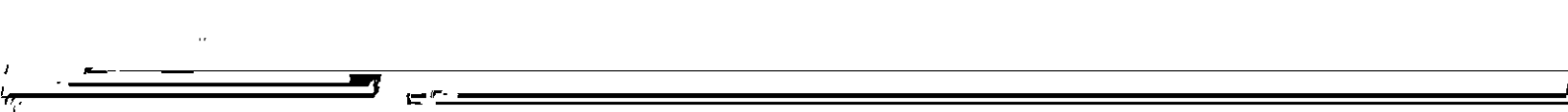
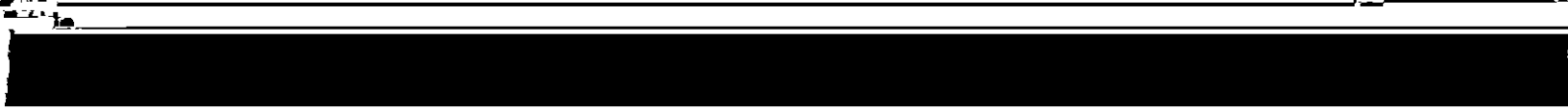


Fig. 11 Effect of Fe-P upper coating weight on wet adhesion of double layered Zn-Ni alloy electroplated steel



stabilized adhesion was obtained regardless of whether the dip or spray treatment method was used.

Figure 11 shows the relation between wet adhesion and Fe-P upper coating weight. As can be clearly seen when compared with Fig. 9, wet adhesion and the *P*



wide blisters. The excellent corrosion resistance of Fe-P/Zn-Ni is considered attributable to the facts that

(4) Fe-P coating prevents crater-form defects during cathodic electrodeposition painting, and inhibits the

