酸性亞鉛鍍金의 浴組成이 均一電着性에 미치는 影響

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The Influence upon Throwing Power of the Acidic Zinc Bath Composites

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Abstract

The throwing power of commercial acid zinc plating solutions is examined and the major factors that affect throwing power are discussed. The effect of the concentration of bath constituents on throwing power is shown in terms of conductivity and cathode efficiency. As the concentraton of zinc chloride is decreased, the conductivity increases until a maximum value is reached and, upon further decrease, the value decreases very slowly. The cathode efficiency decreases with the decrease of concentration. Finally, the throwing power increases with the decrease of concentration rather slowly at first and then rapidly later, forming the plateau portion.

0.15% 炭素鋼의 低溫脆性에 관한 硏究

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Embrittlement Phenomenon of 0.15% Carbon Steel at Low Temperature

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ABSTRACT

Embrittlement phenomenon of 0.15% carbon steel which is used for city water pipe line was studied at low temperature. Liquid nitrogen, dry ice, acetone and ice were used as refrigerants. Notched specimen was prepared for Olsen Impact Test. Effect of number of cooling-heating cycle of the specimen for the embrittlement was also examined. The ductile-brittle transition temperature was found to be in the range of $-10°C$ to $-20°C$. The transition temperature is increased as increasing number of cooling-heating cycle.