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INFLUENCE OF STEEL CHEMISTRY AND OTHER METALLURGICAL FACTORS ON THE APPEARANCE OF GALVANIZED HOT ROLLED STEEL

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ABSTRACT

Galvanized Steels of the same grade have been found to have both a dull grey appearance and a bright appearance. We studied the possible influence of chemistry and other metallurgical factors on the appearance of the steel. It was found that a higher percentage of the zeta (ζ) layer on the surface caused dull/grey appearance. This is due to increased thickness of coating across the defect location caused by a higher amount of Silicon in the steel.

Keywords Galvanizing, Coating Appearance, Zeta Layer, Sandelin Effect

