

## Microscopic Evaluation of Protective Coating by Coated Sheets after Corrosion Load

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**Introduction into problems** - The aim of the paper was microscopically analyze protective layer by coated sheets after corrosion loading which were pre-treated by various ways. The samples were divided into 4 groups according to the pretreatment type and duration of corrosion load. After a corrosive effect on the corrosion chamber the protective layer was subjected to microscopic evaluation. For samples of group I and IV have to degrade the protective layer and the formation of corrosion products on the base material which causes degradation of the protective layer and shorten its life. For samples of group II and III microstructural analysis showed good condition of the painted surface layer and the base material showed no presence of corrosion products. It again confirms the need for compliance of technological conditions for the pretreatment of the surface particularly in the application of modern less aggressive means.

**Keywords:** corrosion, surface pretreatment, surface protection, corrosion products, painted surface layer

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