

Title (en)

Optimized process control in the pretreatment of metals to protect against corrosion on the basis of baths containing fluoride

Title (de)

Optimierte Prozessführung in der korrosionsschützenden Metallvorbehandlung auf Basis Fluorid-haltiger Bäder

Title (fr)

Traitement optimisé dans le pré-traitement du métal contre la corrosion à base de bains contenant du fluorure

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Application

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Priority

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Abstract (en)

[origin: CA2970405A1] The present invention relates to an anti-corrosion treatment method where a series of components having metallic surfaces of iron and/or zinc are contacted with a passivating aqueous pretreatment solution which is located in a system tank and contains compounds of the elements zirconium and/or titanium and also a source of fluoride ions. In the method of the invention a portion of this pretreatment solution is discarded and replaced by an in total at least equal volume portion of one or more such supplemental solutions, which are metered into the pretreatment system tank. While the discard must not exceed a predetermined level, depending on the molar ratio of the elements fluorine to zirconium and/or titanium, in order to ensure a permanently satisfactory anti-corrosion treatment even when not using any chemicals at all to regulate the pickling rate or stabilize the ionic load, the way in which supplemental solution is metered in ensures maintenance of the concentration of the elements zirconium and/or titanium in the passivating aqueous pretreatment solution in the form of water-soluble compounds.

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