

Title (en)

METHOD FOR COATING METAL BODIES WITH A PHOSPHATING SOLUTION AND PHOSPHATING SOLUTION

Title (de)

VERFAHREN ZUM BESCHICHTEN VON METALLISCHEN KÖRPERN MIT EINER PHOSPHATIERUNGSLÖSUNG UND DIE PHOSPHATIERUNGSLÖSUNG

Title (fr)

PROCEDE DE REVETEMENT DE CORPS METALLIQUES AU MOYEN D'UNE SOLUTION DE PHOSPHATATION ET SOLUTION DE PHOSPHATATION

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Application

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Abstract (en)

[origin: WO2004099468A1] The invention relates to a method for coating surfaces of metal objects, especially as a pre-treatment for cold deformation or as a pre-treatment for a metal-rubber compound or to adjust friction coefficients in connection elements, used in connection elements such as screws for screwing purposes. The invention is characterised in that the optionally, already pre-coated metal objects are coated with a composition containing an aqueous, acidic phosphate, said composition containing 8 - 50 g/L phosphate as PO₄, 0.5 - 30 g/L zinc ions, 0 - 5 g/L manganese ions, 0 - 8 g/L calcium ions, 0 - 5 g/L magnesium ions, whereby at least 0.1 g/L of calcium or/and magnesium ions are provided, 0.1 - 5 g/L nitroguanidine, 0.1 - 8 g/L chlorate or/and peroxide ions and 0 - 16 g/L complex fluoride (MeF₄ or/and MeF₆) of Me = B, Si, Ti, Hf or/and Zr and 0 - 5 g/L fluoride ions, whereby the total amount of complex fluoride and fluoride ions ranges from 0.1 - 18 g/L. The invention also relates to a phosphating method wherein the ratio of removal by pickling in relation to the layer weight of the phosphate layer is less than 75 % . The invention further relates to a corresponding aqueous phosphating solution.

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