

Title (en)
PROCESS FOR PHOSPHATIZING METAL SURFACES

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EP 0372591 B1 19930616 (DE)

Application
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Priority
DE 3840668 A 19881202

Abstract (en)
[origin: EP0372591A1] During phosphatizing of metal surfaces comprising at least partly iron or steel by dipping or flooding by means of phosphatizing solutions containing film-forming cations and nitrate or equivalent accelerators, the iron content is limited through precipitation of iron phosphate by withdrawing discontinuously a portion of the phosphatizing solution from the bath tank (1) and contacting it, in a separate aeration unit (3), with oxygen or an oxygen-containing gas, and feeding the resultant solution, freed from iron phosphate sludge, back into the bath tank (1). According to the invention, the portion of phosphatizing solution is introduced from below into an aeration unit (3), which is fitted with a self-aspirating aerating stirrer (4) which narrows at least in the lower region, and is aerated. When aeration is complete, the iron phosphate formed is allowed to settle, and the phosphatizing solution, with a depleted iron(II) content, is sucked upward and fed back into the bath tank (1). <??>In a particularly advantageous procedure, the iron phosphate sludge deposited principally in the narrowed region of the aeration unit (3) is stirred up in water with the aid of a stirrer (8) projecting into the narrowing region, but this is not carried out until several batches have undergone precipitation treatment. <IMAGE>

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