

Title (en)
INLINE SILICON DEPOSITION IN A PICKLING PLANT

Title (de)
INLINE-SILIZIUMABSCHEIDUNG AN EINER BEIZANLAGE

Title (fr)
DÉPÔT DE SILICIUM EN LIGNE DANS UNE INSTALLATION DE DÉCAPAGE

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Abstract (en)
[origin: WO202223248A1] The invention relates to a device and a method for depositing undissolved materials, in particular undissolved silicon compounds, from a pickling fluid in a pickling plant. A pickling circuit of the pickling plant has a pickling tank for pickling metal strips, a return line between the pickling tank and a circuit tank, a circulation pump for circulating a main volume flow of pickling fluid from the pickling tank, and a heating device arranged in a pressure line between the circuit tank and the pickling tank. The device according to the invention comprises a flocculation device, with which at least one flocculant can be introduced into the main volume flow, as well as a deposition device, arranged in the circuit tank and preferably designed as an inclined clarifying device, for the sedimentation of undissolved materials directly from the main volume flow. When pickling e.g. silicon-containing steel strips (electrical steel strips), an at least two-stage flocculation can be carried out using two or more mixing zone containers.

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