

a 2002 0278

The invention relates to the electrodeposition, in particular to the electrolytic processes for metal surface working. Summary of the invention consists in that the used solution is fed into an electrolyzer, divided by a cation-exchange membrane into the anodic and cathodic chambers, the impurities being deposited in the cathodic chamber in the form of hydroxides, which are removed by filtration. For this purpose, the catholyte is subjected to recirculation through a filter, and the index pH is automatically maintained within the limits 2,5...4,3, by electrochemical correction at the catholyte controllable passage through the corresponding chamber of a supplementary electrolyzer with diaphragm, for which there are recorded and compared the pH values at the outlet from the filter and the supplementary electrolyser. According to the difference between the recorded indexes it is alternatively connected and disconnected the catholyte passage through the anodic and cathodic chambers of the supplementary electrolyzer, afterwards into the catholyte there is introduced a supplementary solution containing sodium sulphate 50...70 g/L and aluminum sulphate 20...30 g/L.

Claims: 2

Fig.: 1