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The invention relates to the process for reducing the water carbonic rigidity, caused by the magnesium and calcium salts and may be used for prevention of scale formation.

Summary of the invention consists in that the process provides the water treatment with a periodic current with direct and indirect square pulses with a frequency from 1,1...1,3 kHz up to 2,3...2,5 kHz and conversely with the period of 8...10 ms and the current peak value of 2,5...3,0  $\mu\text{A}$ , at the same time the water treatment is carried out in the presence of a suspension of ferromagnetic colloidal particles of the iron oxides and/or hydroxides in a quantity of 0,01...0,05 g/l, with the water flow velocity of 1...3 m/s.

The colloidal particles of the iron oxides and/or hydroxides are obtained by heating the aqueous weak-alkaline solution of the iron(II) and iron(III) salts, taken in the ratio of 1:2.

Claims: 2

Fig.: 1