



of the use of the household series MHD resonator (U TU 24486585.001; RF TU 3113.001.38959219.2004)

«SOL» LLC (Moscow) and «SpinLite (Moscow) companies have installed the MHD (magnetohydrodynamic) resonator of the household series for reagentless prevention of incrustation of the surface of the tubular electric heating (TEH) element by carbonate sediments and simultaneous removal of the previously formed ones in the group of industrial washing machine (Electrolux W5180H - 1 pc. W5300H-2 pcs and Miely professional Pw5065 - 1 pc.). The MHD resonator was mounted in the common hot water supply line in the Laundry at the address: Moscow, Shluzovaya embankment D. 6, korp.2 . The carbonate hardness index of the water is about 5.2 mg-equ/L.



The core of a problem: constantly increasing furring thickness on the TEH element leads to increase of the water heating period to the desired operating temperature, increase of the washing time and to possibilities of the total system failure. Inspection had revealed an active carbonate furring ($CCaCO_3$ and $MgCO_3$) on the heating elements. This reduces the efficiency of the washing machine and reduces the quality of washing that eventually results in overall financial losses.

The results of the MHD resonator use: after four months of its operation the heating elements remain to be completely clean from scale (Photo №2). The heating time up to the operating temperature during washing and rinsing time were registered at the specified (passport) values. Before, (without MHD resonator) the heating elements were covered by hard scale about 2 mm thick within 3 months of the machines operation.

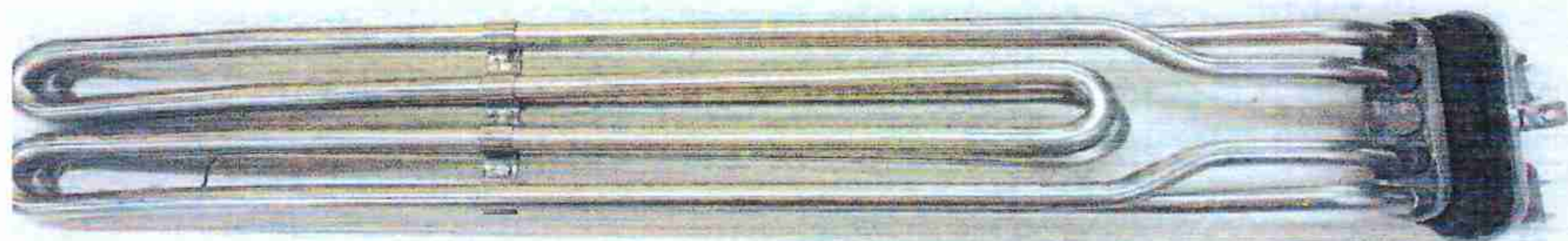


Photo No. 2

Conclusions: It was practically proved the effective combined work of washing machines and MHD resonator operating on the physical principles without the use of chemicals. The use of any antiscaling reagents is economically unprofitable, technically unreasonable and environmentally harmful. The device uses the energy of the permanent magnets field and requires no operating costs. It should be noted that the MHD treated water can wash the previously formed carbonate scales without chemical reagents.

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