

An electromechanical apparatus for multi-factor processing materials comprises flat inductors with a multi-phase distributed winding which generates running magnetic fields with opposite order of phase alternation, a working chamber with discrete working bodies, which is located in a between-inductor gap. Moreover, it comprises low and upper air chambers located in end areas of respectively low and upper flat inductors which interconnect via a pipeline, flat constant magnets installed on the surfaces of flat inductors on side opposite to the between-inductor gap, the working chamber is made of non-magnetic material, 10 % thereof is filled with ferrous bodies, and located between the low and upper flat inductors and air chambers, the upper air chambers are separated from the surface of working chamber by grids and filled with the ferrous balls, the flat constant magnets are located under $\alpha = 35^\circ$ angle to direction of material flow with λ interval which is regulated, if output rate of material treatment changes.