

The invention relates to the mass-transfer equipment for intensification of manufacturing processes, and may be used in installations for the production of biodiesel fuel, in food, chemical, and microbiological industries for the homogenization of products.

The combined electrohydrodynamic cavitator comprises a cylindrical housing (1) with a lower working chamber (2) for hydrodynamic vortex mixing, an upper working chamber (5) for electromagnetic cavitation, a nozzle for liquid supply (10) in the lower part and a nozzle for liquid drainage (11) in the upper part. In the lower working chamber (2) are placed spring Z-shaped wire elements (3), arranged spirally with a shift about the axis of the housing and fixed on both sides. In the upper working chamber (5) is fixed a grid (6), on which are placed asymmetric cylindrical metal particles (7) of soft magnetic material, with the possibility of their intensive rotational-translational magnetic liquefaction. On the outside of the upper working chamber (5) is installed an inductor (8) of electromagnetic rotary field with an electric current regulator (9).

Claims: 3

Fig.: 2

