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The invention relates to the combined processing of vegetable oils for the production of alternative fuel, namely to a plant for the refining of vegetable oils and production of biofuel on base of fatty acid methyl esters.

The plant, according to the invention, comprises, connected by a piping system, a vacuum filter (1) with drum, connected to a capacity (18) for the mixture of oil and perlite; a receiver (2) for oil, a vacuum pump (3), a condenser (4) for distillation of methanol vapors, a distiller (5) equipped with a reservoir (6) for distilled water and a metering pump (7), a capacity (16) for the refined oil equipped with a pump (17), a reactor (9) for refining and transesterification, inside which are placed a carbon dioxide disperser, an agitator and a distilled water disperser, to the reactor are connected in series an ejector (14), a hydrodynamic vortex mixer (12), consisting of a tubular body with wire elements arranged in a spiral inside it, a pulse magnetodynamic cavitator (11), consisting of a tubular body of diamagnetic material, on the outside of which is mounted an inductor of rotating electromagnetic field, and inside are placed cylindrical metal particles of soft magnetic material, coupled with a mixer (10); at the same time, the plant further includes a reactor (13) for reagents, a sealed centrifugal pump (8), taps (28, 29, 30) and valves (31, 32, 33,...51).

Claims: 2 Fig.: 5

