

The invention relates to the technology and equipment of sugar and winemaking plants, namely to a process for contacting the liquid component with gas jets and to a device for realization thereof and may be used at the stations for purification of diffusion juice and for oxidation of wine stocks in the winemaking.

The process for contacting the liquid component with gas jets includes formation of the liquid component's jet, gas supply into the liquid component at its intersection with the gas jets. At the same time, the liquid component's jet has hemispherical shape, and the gas supply is regulated depending on the dose of the liquid component.

The device for contacting the liquid component with gas jets includes a liquid component receiving reservoir (16), a gas supply box (22) with inlet nipple (4), a supply pipeline (1) placed into the liquid component collecting reservoir (16), with an inlet branch pipe (3) for the liquid component, a hollow vertical rod (2) placed coaxially with the supply pipeline (1), onto the lower end of which it is mounted a valve, at the same time onto a part of the rod (2), placed inside the gas supply box (22), there are made holes. The upper end of the rod (2) is connected to a box (7), wherein there are mounted rotation and pulsation modules. Into the hollow vertical rod (2) it is installed a rod (13). The rotation module consists of a pair of gearwheels (12), one of which is joined by means of a groove with the rod (13), and an electric motor (14) for rotation of the rod (13) and of the valve. The pulsation module contains a pair of conic gearwheels (8) and a cam (10), mounted onto a common shaft, a bush (11), provided with spring, and an electric motor (9). The valve is made in the form of two hollow perforated placed into each other hemispheres (5, 6) with a common radius of curvature, each of which is equipped with a cover (30, 31). The outer hemisphere (5) is connected with the help of the hollow vertical rod (2) to the box (7), and the inner one (6), by means of the rod (13), having its lower end fixed to its cover (31), is connected to the cam (10) of the pulsation module. Both hemispheres are mounted with the possibility of alternate motion under the action of the drive (27), and the inner hemisphere (6) with the possibility of rotation and pulsation.

Claims: 2

Fig.: 2

