

a 2006 0029

The invention relates to the combined biochemical processes for sewage treatment from organic compounds and may be used at the treatment plants in the wine and food industries.

The process includes the sewage concentration by ultrafiltration of macromolecular organic components up to the OCC values of 20000...40000 mg/dm³, with separation of filtrate having the OCC value of 100...300 mg/dm³, the anaerobic fermentation of concentrate, using fixed microflora, with biogas formation, at the same time for microflora fixation there are used vines with the diameter of 2...3 mm and the package density of 3...5 kg/dm², then it is carried out the aerobic purification of the fermented concentrate and of the filtrate.

Moreover, the sewage concentration is carried out by using tubular ultrafilters under the pressure of 3...5 atm and the rate of the treated water flow of 5...10 m/s.

The result of the invention consists in reducing the energy consumption and the prices of the treatment process.

Claims: 2