

Block-modular water treatment complex comprises electrical reactor, flotation reactor with gas saturation system, settler-clarifier and filter, all hydraulically interconnected; pipelines for feeding water to the treatment process and discharging treated filtrate; two siphon-type -shaped pipelines with hydraulic locks, upper parts of which are connected by bridge, and lower ascending parts are connected, respectively, to filter, flotation reactor, and clarifier, and also includes sludge collector with separate gas saturation and air ionization system. Complex is integrated with artificial intelligence (AI) system elements such that water supply pipeline for treatment is connected to diaphragm electrolyzer for chlorine dioxide synthesis (ClO_2), which is coupled with electromagnetic vortex layer apparatus (VLA) and connected to artificial intelligence system. Flotation reactor, filter, and sludge collector are equipped with mixers-flocculators for activation suspension of clinoptilolite, activated by catalyst solution from cathode zone of diaphragm electrolyzer, which is connected via anode cell to sodium chlorite solution dosing unit and integrated with clean filtrate discharge pipeline, and integrated with artificial intelligence system components.