Regenerative and cleansing system of membrane purification plants GDP

Regenerative and cleansing system of membrane purification plants (GDP) provide removing of accumulated contamination from membrane elements surfaces of ultrafiltration plants and reverse osmosis of I and II stages, also from the surfaces of the basic water heaters. The system includes compressor station for supply of compressed air in ultrafiltration plants for carrying tests on membrane integrity.

GDP system is on periodic duty except for blocks of compressed air preparation. System works during aqueous washing of ultrafiltration plants. The washing is maked by clarified water from GDB tanks. Reagents (natrium hypochlorite, natrium hydroxide, sulphuric acid) are dosed in pipeline of purified water supply at the chemical washing of ultrafiltration plants.

The chemical washing tank is filled with reagents immediately before the chemical washing of the ultrafiltration and the reverse osmosis plants. Dissolving of reagents in tank is made by permeate after I or II stages of the reverse osmosis plants.

Procedures of aqueous and reverse chemical washing are performed automatically and remotely. The ultrafiltration plants switch on washing regime after filtration time(40-60 min) or fixed volume of passed water (40-70 m³).

The washing of these systems is defined depending on the changes of working parameters: pressure, temperature, conductivity and consumption.