

## MULTIMEDIA SAND FILTERS

Multimedia sand filters are used for removing suspended solids, turbidity and other particles from raw water. System is consisting of settling different dimensions of gravel and sand sizes with more than one layer.



Sand filters are being composed of three different granule size gravel, quartz, sand and anthracite minerals at the top layer, forms multi layered passage. While raw water is passing through multimedia materials from up to down hard substance which exist in water are hold in those layers by quartz and anthracite's electrostatic feature. Thus, the water will be free from deposits and will have clear appearance.

Sand filters present the most suitable solution that will meet your filtration need for various capacities. They work at optimum time with administration comfort and service support. Parameters that effect productivity of multimedia filters are; quality and quantity of filter body, well-bedded minerals, filtration rate and additional chemicals for flocculation. A good filter can have filtration accuracy of 15-20 micron.

Modern technology by diminishing the need for human intervention to zero, has manufactured self-cleaning filters (which can carry out backwashing) which operate with automatic valve (pneumatic or electrical) system. According to capacity and filtration rate, vertical or horizontal sand filters are chosen at the design step.



Surface piping consisting of pneumatic or electrical actuator controlled valves are used for industrial type filters. The backwash period can be controlled according to flow, time or differential pressure between the inlet and outlet of the filter measured by the pressure transmitters.



The system is able to return again to service mode automatically after the cleaning process. The control of the system is provided by a PLC. All the filtration time, backwash time, backwash period, on/off back signal of each valve are controlled from the PLC Panel.