In many water purification needs there can be a requirement to add dissolved oxygen to the water for a specified purpose or to adjust pH, or add chlorine, coagulant, etc. When this is required it is desirable to add such process parameters as efficiently, precisely and cost effectively as possible. In Purifics water purification solutions any or all of these process parameters can be directly added to the CUF, Photo-Cat and DeWRS processes as part of the existing piping. Doing so eliminates the need in traditional methods for additional foot print, civil work, controls and associated costs. Case studies of existing installations and pilots document these advantages and benefits.

In-Line Dissolved Oxygen Addition (DOA)

In-line Dissolved Oxygen Addition is a proprietary ceramic membrane process that adds dissolved oxygen to the water precise, to the solubility limit, efficiently using ambient air at near stoichiometric levels making it highly efficient. This is not a sparging process, does not require additional equipment like blowers or mixers, and does not create bubbles.

In-Line pH

In many water process applications it may be required to raise, lower or neutralize the water’s pH for a specified purpose. In-line pH adjustment with PID control does this precisely.

In-Line Disinfection

On board in-line primary & secondary disinfection using chlorine can be applied pre-ceramic membrane as part of the ceramic membrane process. This automated process has feedback to obtain and maintain the required residual and process data logging. When In-Line Disinfection is used with the CUF process to remove DOC (THM & HAA Precursors) it eliminates the need for expensive disinfectants like Chloramines as well as reducing the base line demand.

In-Line Coagulant Addition

Coagulant is added directly in front of the ceramic membrane process which eliminates the need for flocculation and settling basins. It also uses the coagulant more effectively and reduces the Coagulant demand over traditional baseline process.