Side Stream Filter Advantages

Open loop cooling towers are subject to windblown contamination such as dirt, dust and sand; debris from trees, plants, shrubs, leaves, and seedlings; silt, sand, and turbidity from make-up water; and biological growth that may form with/ without proper chemical treatment. Likewise, closed loop chill and heating waters have problems with sediment from make-up water, scale, and biological growth. All of which can be removed by adding filters to improve your chemical treatment program.

Advantages

Filtration equipment cuts maintenance and operational costs by removing suspended solids to clarify the water. As a result, fouling is dramatically reduced along with maintenance labor to clean condenser tubes, heat exchangers, and basins which is frequently required without the use of filters.

As dirt, dust, sand, and other debris are removed, circulation and heat exchange efficiency are improved. Energy costs are reduced. There's less wear-and-tear on pumps. And blow-down frequency and water consumption are reduced after filters are installed.

And here's the really good news: you can easily recapture capital costs for filtration equipment by reducing labor and other operational costs. All this, while improving your chemical treatment program.

Side Stream Filtration

For circulating systems which operate on a continual basis (as in cooling and heating loops), it is not necessary to filter the entire flow of the system because side stream filters will clarify the water after an initial start-up period. The water becomes crystal clear by continually filtering the water through the filtration system, as in a swimming pool.

Ten percent of the flow is typically used to size a side stream filter properly. By using side stream filters, smaller filters are required and installation costs are dramatically reduced since smaller pipe fittings and smaller valves are needed.