

ChemScan[®]

PROCESS ANALYZERS

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ChemScan[®] Method Summary #167 Solids Correlations

Conventional Solids Analysis

Solids are the matter suspended or dissolved in water or wastewater. Conventional measurement techniques therefore require either evaporation of all liquid from a sample, followed by measurement of the residue (Total Solids Analysis) or filtration of the sample, followed by evaporation and measurement (Total Dissolved Solids) or subtraction of the two prior values (Total Suspended Solids).

These methods are time consuming, labor intensive and subject to variation based on filter pore size and evaporation method.

ChemScan Analysis Method

Light absorbance can be used to estimate the Total Solids, Suspended Solids and/or Dissolved Solids in samples. Short (uv) wavelengths are generally used to measure dissolved solids (following compensation for turbidity using near visible wavelengths). Longer wavelengths are used for Total Solids correlation. Full spectrum analysis is generally performed for total suspended solids correlations.

Unfiltered samples are required for Total Solids or Total Suspended Solids analysis. Samples with solids content above 150 ppm or turbidity above 60 NTU are not suitable for analysis by a standard ChemScan Analyzer.