

SSVI TEST
Equipment

SSVIr

The SSVI Reader determines sludge settling rate and gives an indication of turbidity and so mixed liquor suspended solids (MLSS). It is made to fit with the standard SSVI measuring equipment the Type 305.

The Reader operates by passing an infra red beam through the SSVI apparatus. The amount of infra-red light absorbed by the sludge is related to the solid content. Hence, the settled sludge will absorb significantly more light than the clear supernatant showing the sludge height. The sludge height blanket is plotted against time, from this data it is possible to determine the settling rate as well as SSVI. An example of the SSVI chart is shown below.

Determine SSVI
Calculate settling rate
See the settling graph

SSVIr to simplify and record SSVI measurements. Triton Electronics Ltd

Since SSVI should be related back to a MLSS of 3.5 g/L it is normal to do two tests and extrapolate. Generally, it is easiest to do the tests at full MLSS and one at half MLSS (achieved by diluting the sample with an equal amount of supernatant). However, as the reader can estimate MLSS1 the dilution does not have to be accurate. Further, the Reader will extrapolate from the two test samples and produce the SSVI3.5.

The SSVI Reader can store test data in Microsoft Excel files, which can be accessed either over the Internet or through USB connections. The Reader can also be used as a data analysis point and SSVI results can be interrogated directly with the onboard graphing facilities.

The graph shows how settling curves and so settling parameters can be easily and quickly generated.

Settling rates

