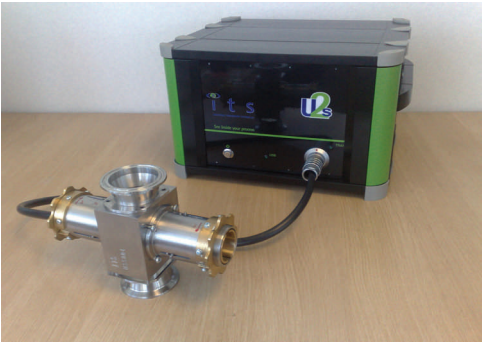




Overview



Process Ultrasound Spectroscopy

The ITS U2s is an ultrasound spectroscopy platform which can be applied to a wide range of materials from over a wide range of operating conditions. It has been developed for in-situ process characterisation and can provide real-time information on the microstructure of industrial materials.

Ultrasonic Spectroscopy has been applied at lab-scale to liquids, colloids and suspensions. The ITS U2S technology extends the use of USS to a new range of in-line applications, including:

- high concentrations (up to 75v%)
- aerated processes
- difficult to access processes environments

The U2s ultrasound spectroscopy system delivers:

- fast measurement methods
- in-line/in-situ application capability
- modular design for easy customisation
- transmission and reflected data collection

The U2s has proven applications in:

- density measurement of solids and in pure/mixed liquids
- determination of thermal properties of liquids
- rheological characterisation of liquids and soft solids through phase velocity
- infer changes in particle size of colloids using attenuation
- relaxation phenomena in biomaterials and soft solids

Principal applications:

- Kinetics
- Concentration
- Rheology
- Structure

Benefits to Users:

- Increased Process Understanding
- More effective Process development
- Improve, more consistent product quality

Industries:

- Biotech
- Chemicals
- FMCG
- Mining
- Petrochemicals
- Pharmaceuticals
- Others...