QUADBEAM
TECHNOLOGIES

In-Line Suspended Solids Measurements for Monitoring and Control

The Quadbeam Sensors use advanced optical technology to provide stable, reliable and robust suspended solids measurements for industrial applications and harsh environments.

Common Applications

Waste Water Treatment:

Primary Sedimentation tanks: control of sludge withdrawal.
Aeration Tanks: Control of Mixed Liqueur Suspended Solids.
Secondary Clarifiers: Inlet Suspended Solids (Solids Load), Overflow Monitoring and Control of Sludge Withdrawal.
Sludge Dewatering: Flocculation Control, Performance Monitoring
Final Effluent: EPA Compliance monitoring.

Water Treatment:

Flocculation control,
Clarifier Sludge Withdawal,
Sludge Thickener Control
Filter Backwash Control

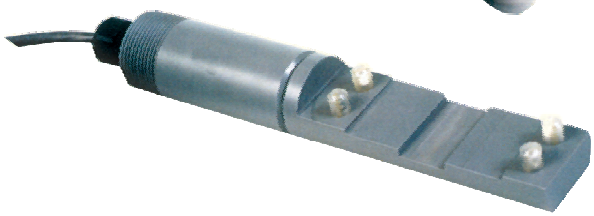
Mineral Processing:

Tickeners
Clarifiers
Belt Presses
Centrifuges

} for control of chemical addition and performance optimisation

Dairy & Milk Plants:

Loss monitoring,
CIP interface,
DAF Plant Control



Pulp and Paper:

White Water,
Effluent Plant Monitoring & Control

The Quadbeam Principle:

Using multiple optical emitters and detectors, the Quadbeam principle measures solids concentration from the depletion of transmitted light, over a complex geometric pattern of light paths. This technique automatically compensates for variations in the optical characteristics of the sensor components to provide long term stability and reliability in the measurement.

In the same manner as for component variation, the Quadbeam measurement principle automatically compensates for any fouling of the senor that occurs in dirty applications. The compensation is maintained until the fouling is to severe to ensure reliable measurement and in this case an alarm is generated to indicate the requirement for operator or service attention. An inbuilt automatic cleaning functionality can eliminate the requirement of regular operator or service attention.