

The ZetaScan® 1.3 at a glance



Why measuring charge?

Why should the charge be measured during the flocculation process?

The charge, in fact the colloidal charge, determines the entire flocculation process in wastewater treatment.

Since this parameter could previously only be determined by special laboratories, it is hardly known within wastewater treatment.

Therefore, indirect methods such as turbidity, solids concentration or other auxiliary parameters are usually used

However, these are only approximate values. The consequences can be overdosing, underdosing or incorrect dosing, thus leading to an undesirable result and usually financial expenditure.

Advantages of colloidal charge as a measurement quantity:

With this type of measurement, the actual charge demand of the sludge is recorded. Likewise, it is easy to measure the charge provided in products. Both measurement results have the same unit and therefore the product demand can be determined precisely. This is comparable to phosphate precipitation in sewage treatment plants, where a simple calculation allows the exact dosage to be determined



Calculations to determine dosages are not necessary. The powerful app takes on this task. In addition, the database function enables an overview of all parameters and results. In this way, seasonal fluctuations can be recorded and displayed graphically.

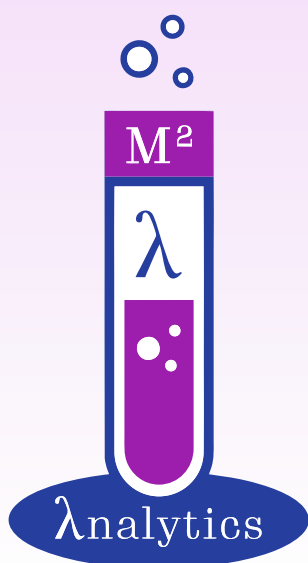
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The ZetaScan ® 1.3 allows the precise measurement of the colloidal charge in aqueous solutions such as centrate/filtrate, in raw sludge and untreated wastewater streams and also in products.

Different measuring ranges offer the most accurate measuring result for different requirements. A detailed analysis manual with possible applications offers valuable support.

Possible uses of ZetaScan® 1.3

- Cation/ anion demand for solid particles
- Polymer content in concentrates, filtrates etc.
- Active substance in products
- Additionally, ammonium and phosphate
- Sewage sludge dewatering
- thickening
- Filtration
- sedimentation
- flotation
- Chemical wastewater treatment
- Quality control of products
- Deammonification protection



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Basic equipment:

- ZetaScan 1.3
- charger
- Charging and data cable
- 4 measuring cuvettes
- Cleaning brush measuring cuvettes
- Analysis manual with application examples
- operation manual
- 1 set of reagents

Optional accessories:

- Analysis measurement kit consisting of:
- Mini magnetic stirrer with battery
- Charging cable
- Magnetic stirrers
- Magnetic bar
- 4 x 5 ml pipettes including pipette tips
- 1 x 1 ml pipette including pipette tips
- Pipette stand
- Mixing cylinder 100 ml
- Cleaning brush

All parts are also possible as individual spare parts.