CE587 Dissolved air flotation

Removal of solids by flotation

Flotation, alongside sedimentation, is another process often used in water treatment to remove solids. Dissolved air flotation is the most commonly used flotation process.

Experiments with great practical relevance

Our CE 587 teaching unit allows you to study all important aspects of this process. In order to create high practical relevance, we have placed great emphasis on the highest possible realism in the development of this device.

The device consists of a supply unit and a trainer. First, the raw water is pre-treated by flocculation. Then the flocs are transported to the surface of the water in the flotation tank by means of small air bubbles. An electrically driven scraper allows you to clear the water surface of the floating substances. Many of the components used, such as electromagnetic flow rate sensors and metering pumps, are also used in large-scale industrial plants. By using transparent materials you can optimally observe all the stages in the process.

1

Supply unit



ζ6

1 storage tank for raw water

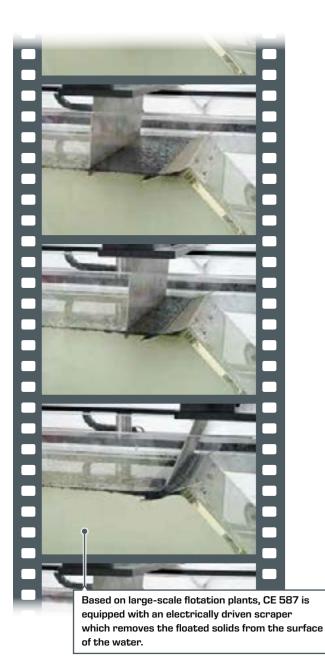
3 electrically driven scraper

6 electromagnetic flow meter

4 flotation tank 5 metering pumps

Standard at GUNT: use of high-quality industrial components such as professional metering loading rate (rising velocity) pumps

2



About the product:







	Learning objectives
•	functional principle of dissolved air flotation
	creation of a stable operating state
	effects of the coagulant and flocculant concentration
•	determination of the hydraulic loading rate (rising velocity)

