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Product Name :
Demonstration Of Dissolved Air Flotation

Product Code :
LBNY-0005-1190003



Description :

Flocculation chemicals can be added to the raw water in order to improve the flotation of the contaminants. The diatomite provided is suitable as a contaminant. Flotation processes are used to separate solids from a liquid. The flotation process most commonly used in water treatment is dissolved air flotation. The suspension to be treated is placed in a tank. A pump transports the raw water, which enters the flotation column via a vertical pipe. The air dissolves in the water under pressure. Part of the water flows back to the pump via a bypass. The other part of the water enters a pressure vessel filled with Pall rings. The height of the supply line can be adjusted. The pressure vessel ensures a sufficiently long dwell time to dissolve the air and to separate undissolved air. A water circuit with pump is connected to the flotation column. Two compressors supply air to the water circuit on the suction side of the pump.

The water then enters the flotation column from below via a valve. This causes a sudden drop in pressure to almost atmospheric pressure. The contaminants rise up in the column together with the air bubbles. At the upper end of the flotation column, the contaminants enter a circulating channel. Since the solubility of air increases with increasing pressure, the excess air forms small bubbles. The air bubbles accumulate on the contaminants.

Features:

Transparent tank for observing the processes
Mechanical water treatment

Technical Specification :

Continuously adjustable speeds of peristaltic pump and stirring machine
Height-adjustable inlet for raw water into the flotation column
Flotation column made of plexi glass

2 compressors for introducing the air into the water circuit
Transparent pressure vessel with Pall rings
Raw water tank with stirring machine
Peristaltic pump for pumping raw water
Water circuit with pump and bypass.



Laboratory Instrument India