Immersion Reactor

Abstract

The invention relates to a device (1) for adding chlorine dioxide to water, comprising a first feed line (5a) for feeding a first reaction component, a second feed line (5b) for feeding a second reaction component, a mixing tube (2) for mixing and reacting both reaction components to form chlorine dioxide. Both feed lines (5a, 5b) open into one end of the mixing tube, and at the other end of the mixing tube, a suction chamber (4) is disposed, into which feed water to be enriched with chlorine dioxide can be injected by means of a nozzle (12). The device further comprises a wastewater line (13) leading downstream out of the suction chamber (4). The aim of the invention is to further develop such a device such that said device has a simple and robust design and allows for chlorine dioxide syntheses that are based on two reaction components to be carried out safely. Said aim is achieved by providing the mixing tube (2) with an admission opening (10) for admitting reaction-component-free admitted water to be enriched with chlorine dioxide.

(Fig. 3)