

Title (en)
TUBE REACTOR

Title (de)
ROHRREAKTOR

Title (fr)
RÉACTEUR TUBULAIRE

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Application
EP 11706795 A 20110221

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Abstract (en)
[origin: WO2011131389A1] The invention relates to a system for adding chlorine dioxide (ClO₂) to water (H₂O), comprising a first feed line (5a) for feeding a first reaction component (HCl), a second feed line (5b) for feeding a second reaction component (NaClO₂), and a mixing pipe (7) for mixing and reacting both reaction components to form chlorine dioxide, wherein both feed lines (5a, 5b) open into the mixing pipe (7), and wherein the mixing pipe (7) is disposed coaxially within a water conduit (8) carrying the water to be enriched with chlorine dioxide. The aim of the invention is to provide a specific design for a system of the type in question having a low consumption of chemicals. The design should also make it possible to upgrade existing water conduits to obtain a system for adding chlorine dioxide into the water (H₂O) carried by the water conduit (8). Said aim is achieved by providing a substantially planar, annular flange disc (1), from the periphery of which both feed lines (5a, 5b) extend to the centre of the flange disc (1) and open there into the mixing pipe (7). The mixing pipe (7) extends perpendicularly to the plane (E) of the flange disc (1) and away from said flange disc and is closed at the proximal end, apart from the mouths (6) of the feed lines (5a, 5b), and open at the distal end. The water conduit (8) has two conduit sections (8a, 8b) which are connected via a flange connection (9), and the flange disc (1) is fixed in the flange connection (9).

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