

LOOP FLOW TYPE BUBBLE GENERATION NOZZLE

ABSTRACT

There is provided a loop flow type bubble generation nozzle capable of improving the bubble generation efficiency compared to conventional nozzles without reducing the bubble generation efficiency even when liquid containing impurities is used. A loop flow type bubble generation nozzle 10 includes a tubular bottomed member 1 having a circular cross section and a tubular member 2 which is fitted into the other end side of the bottomed member 1. A substantially cylindrical space surrounded by the bottomed member 1 and the tubular member 2 serves as a loop flow type gas-liquid stirring and mixing chamber 6. The tubular member 2 has, on the center thereof, an inflow hole 7 which is capable of allowing liquid and gas to flow therein, and a first jet hole 8a and a second jet hole 8b which are capable of jetting liquid and gas. The inflow hole 7 is formed in a tapered shape whose diameter continuously expands from the first jet hole 8a toward the loop flow type gas-liquid stirring and mixing chamber 6. A plurality of cut-away parts 7a are formed on an end face of the inflow hole 7, the end face facing the loop flow type gas-liquid stirring and mixing chamber 6.

[Fig. 1]