

ABSTRACT

A cavitation wave aggregator, comprising a connecting pipe, one end of the connecting pipe is fixedly connected to an adjusting pipe, one end of the adjusting pipe is fixedly connected to a cavitation generator, water flows from direction A to direction B inside the resonance cavity, and is conveyed within the cavitation generator, water flow is accelerated and the local pressure is reduced through the cavitation generation tube, thereby inducing the formation of bubbles and creating microbubbles, pressure waves generated by the resonance cavity propagate through fluid in the form of sound waves and are finally reflected and focused by an arc-shaped wave-aggregating port, creating a high-pressure, high-temperature, and high-energy concentration zone, bubbles fully grow in this zone, grown bubbles rapidly collapse upon contact with microorganisms via water jets, generating tremendous impact and shear forces, thereby easily remove attachments such as barnacles from a hull bottom, with better results.