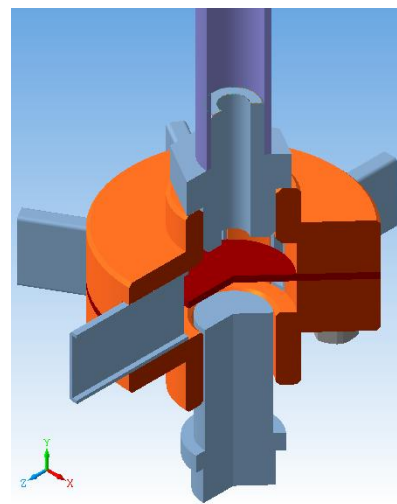
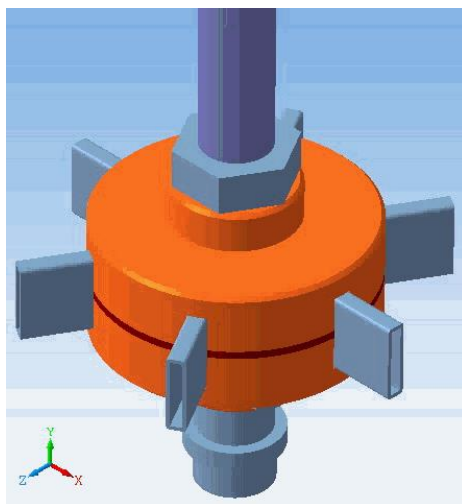
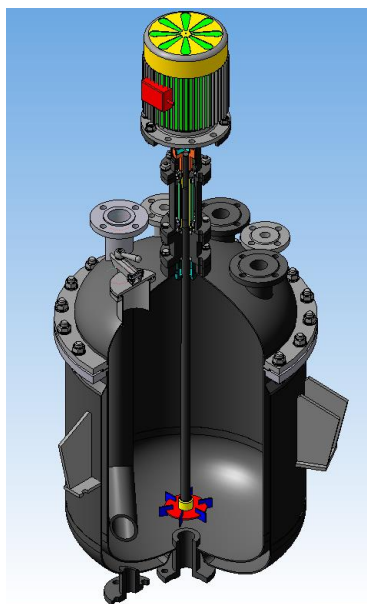




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Apparatus for dispersing liquids



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Devices for dispersing gases in liquids used in chemical, petrochemical industries can, in comparison with classic bubble machines, to provide a higher gas content of the liquid-gas mixtures and high values of the mass transfer, as well as intensive circulation of the gas phase in volumetric devices.

In this area the authors received more than 8 patents on devices and equipment design processes in gas-liquid reactors, published more than 40 scientific papers. Unlike known mixing devices designed constructions energy conversion mechanism is used to provide suction through the reactant gas channels are hollow stirrer using a centrifugal force and the formation of a turbulent zone behind the blades.

Use of self-priming in industrial reactors allows mixers tend to reduce the duration of the reaction to increase the conversion of reactant gas and a better quality product, particularly at a low pressure reactant gas. This allows for minimal cost to get a significant economic impact in the real processes.

Self-priming impeller can be used in gas-liquid reactors for carrying out the processes of sulfonation reagent gas hydrocarbons, chlorination, oxidation (ozone) and purification steps of waste liquids from chemical pollution.

Data reactors with devices for liquid dispersion can be developed for the respective processes.

Reactors with self-priming volumetric type mixers tested in industrial conditions at the stages of chlorination and sulfonation of organic compounds with gaseous reactants, used in the manufacture of surfactants to sulfonation stages α -olefins and heavy fraction alkyl benzenes.