

ABSTRACT

Particle Size Breakup Device and Its Performance Estimation Method and Scale Up Method

Herein is disclosed a comprehensive mixer performance estimation method that can be applied to the mixers of the rotor-stator type having various configurations and circulation systems.

Specifically, the performance estimation method for the mixers of the rotor-stator type includes the steps of: obtaining the total energy dissipation rate ε_t for each of the mixers, measuring the size of each of the mixers, the power requirements and flow rates during the running time of each of the mixers, estimating the magnitude (smallness or greatness) of the configuration dependent term value of each of the mixer as a whole which is specific to each of the mixers, and estimating the performance of each of mixers accordingly.

Figure 1