



BATCH REACTOR APPLICATIONS

A batch reactor is a vat of limited size and volume where industrial chemical reactions are processed and then withdrawn. The liquid product in some of these batch reactors needs dissolved oxygen to be infused to facilitate a chemical reaction. Very few aerators lend themselves for installation in a batch reactor. Either such aerators are much too large and bulky to be used or else they use emitters which become clogged in short order. In many cases the client needs a gas other than oxygen to be infused into the batch liquid.

In many cases PAS aerator is perfect for installation and operation in a batch reactor. The client simply removes the manhole cover or access port on top of the reactor, drops the turbine and airshaft into the liquid in the reactor vessel, and turns on the motor. The degree of aeration can be controlled by use of a Variable Frequency Drive which can adjust the RPM (revolutions per minute) of the turbine to meet the level of oxygenation needed.



If a gas other than oxygen is needed, Precision Aeration Solutions can provide a debris sleeve connected via a snorkel to a canister or supply line containing the gas. The rotating turbine then draws this gas into the vessel as needed. The materials used in the construction of the turbine and airshaft make the PAS aerator impervious to many chemicals.