

### Product Description

Exclusively from De Dietrich Process Systems, OptiMix® offers tremendous optimization of the mixing performance of glass-lined steel reactors by integrating three baffles on the vessel wall. This patented design enhances heat transfer, solids suspension and distribution, gas dispersion, gas flow rates, and mass transfer.

### Product Features

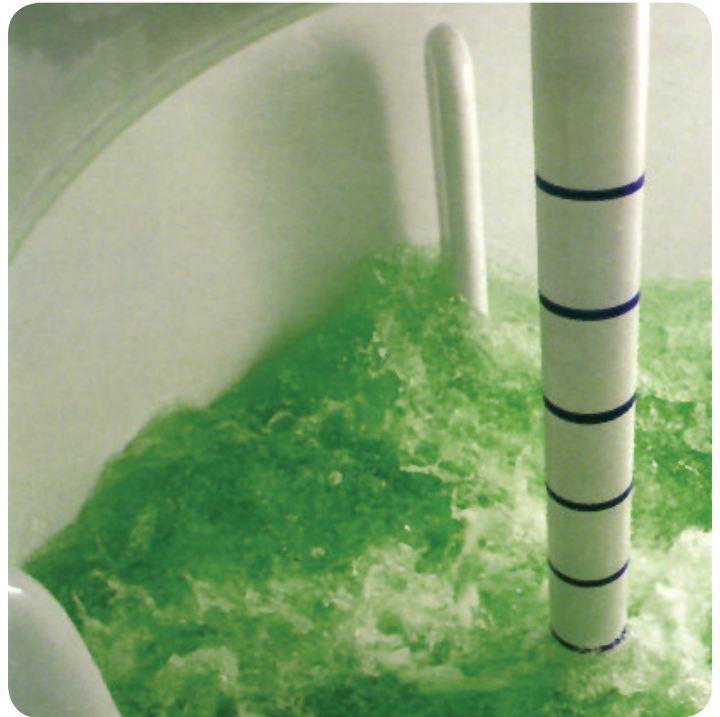
OptiMix reactors are lined with 3009 glass for superior corrosion resistance. All clamped-top/CTJ OptiMix reactors come standard equipped with a pitched-blade turbine; closed-welded/GL OptiMix reactors include a GlasLock agitator with adjustable blades. A fixed speed drive is vertically mounted to keep nozzles and accessories unobstructed for operational use.

### Specifications

- Volumes from 30 to 2,000 gallons (clamped-top/CTJ series)
- Volumes from 300 gallons (closed-welded/GL series)
- Pressures from full vacuum to 90/150 psig (6/10 bar)
- Temperatures from -20 °F (-30°C) to 500 °F (260°C)

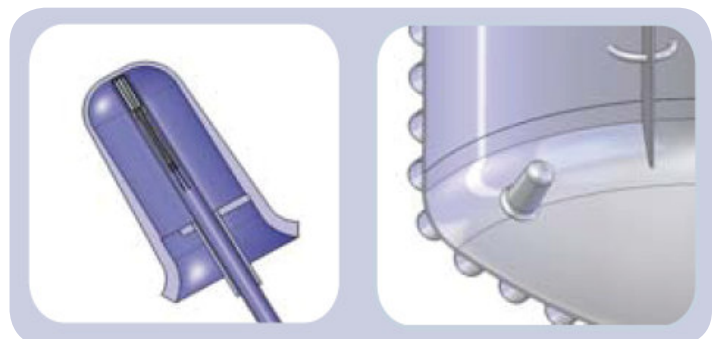
### Options

- OptiMix baffles are also available in QVF borosilicate glass reactor designs.
- OptiMix baffles can be added to an existing vessel during reglassing, allowing you to easily upgrade any reactor with this technology.



### OPTIMIX ADVANTAGES

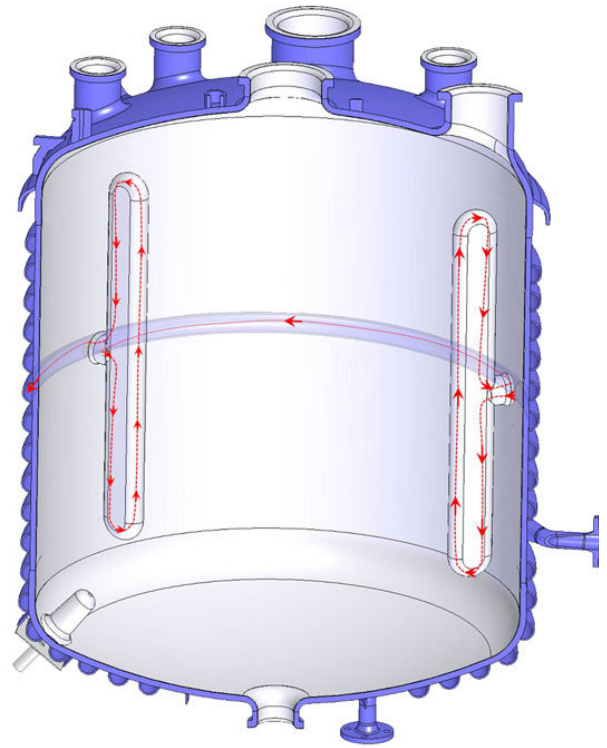
- Eliminates the need for top entry baffles, freeing up an additional nozzle for process use.
- Improves CIP efficiency by eliminating the difficult to clean top head pocket at the baffle/nozzle interface.
- Significantly reduces vortexing and splashing, resulting in less product drying and sticking to the heated wall above the liquid surface.
- The symmetrical baffling of the OptiMix reactor reduces shaft deflection and extends seal life by minimizing the bending loads that are imposed on the agitator shaft.



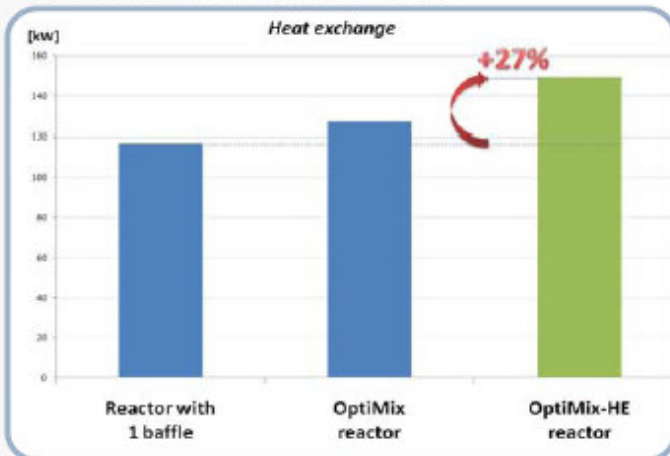
*Temperature probe integrated in the wall*

**Product Description**

DDPS has combined the best technologies in glass-lining to produce a process reactor of unequal performance. With a HemiCoil split-pipe jacketed reactor, heating and cooling media flow through the pipe coils with high velocity and turbulence. As a result, film coefficients and heat transfer rates are higher than in conventional jackets. By melding the advantages of the HemiCoil jacket with OptiMix's three integral wall mounted baffles, DDPS can now offer a high performance reactor with superior efficiencies in both mixing and heat transfer. The OptiMix-HE (Heat Exchange) is a new design that circulates the heating and cooling media contained in the HemiCoil jacket through the baffles, increasing heat transfer area by up to 25% enabling a more homogeneous, faster thermal management.

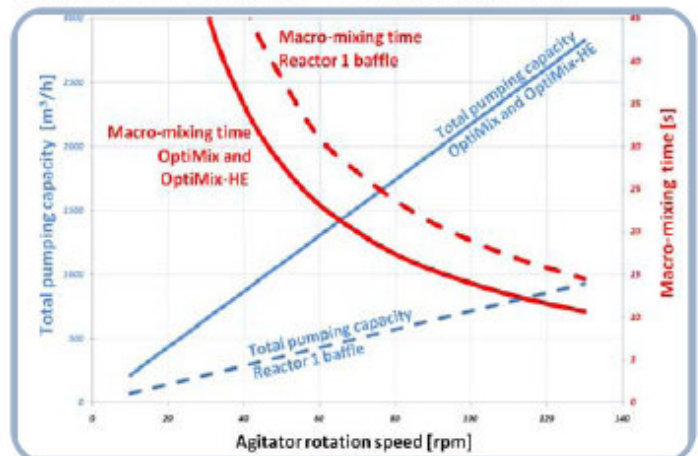


**THERMAL COMPARISON**



*Reactor with HemiCoil, agitation 110 rpm, sulphuric acid, thermal fluid 150°C*

**HYDRODYNAMIC COMPARISON**



*Boost the Pumping Rate of your Agitation Reactor with 45° flat blades, sulphuric acid*