

# THE OPTIMIX® REACTOR

Exclusively from De Dietrich Process Systems, the OptiMix® reactor offers tremendous optimization of the mixing performance of glass-lined steel reactors by integrating three baffles on the vessel wall.





## OptiMix® reactor: The efficient technology

This patented design enhances heat transfer, solids suspension and distribution, gas dispersion, gas flow rates and mass transfer.

The OptiMix glass-lined reactor's performances are based on the integration of three baffles onto the vessel wall. This leads to a notable improvement in the capacity of the mixture and in heat transfer compared to the standard DIN series.

The result is that all the nozzles remain free for the process. This arrangement considerably improves the hydrodynamics by using an optimized baffling effect.

The profile of the paddles prevents the accumulation of crystals in the event of crystallization. This design satisfies two of industry's primary requirements: optimal process efficiency and improved cleanability of the reactor, as well as a reduction of the amount of dead zones which generally occurs with a standard, nozzle-mounted baffle.

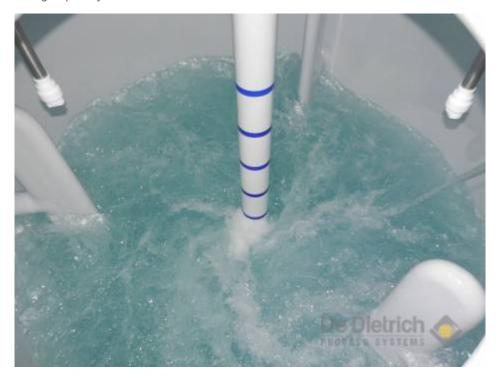
#### CHARACTERISTICS

- OptiMix reactors are lined with DD3009 glass for superior corrosion resistance.
- A complete range standardized from 6.3l (glass) up to 25m<sup>3</sup> (Glass-lined).
- Working conditions:
  - Pressures from full vacuum to 6/10 bar
  - Temperatures from -30°C to 260°C
- The OptiMix reactor range is fitted with an integrated sensor on the shell which enables control of very small reaction volumes.
- Equipment is interchangeable with standard reactors of the same size. OptiMix comes standard with two coil zones and a GlasLock® agitator, with optional jacket.

#### **ADVANTAGES**

- Mixing efficiency
  - Improved heat transfer
  - Increased mass transfer
- Easy to clean
- All nozzles free
- No more vortex, less waste
- No splashing

- No floating products
- Baffles distant from wall:
  - No deposits on wall
  - No expansion stresses on baffles
  - No heating / cooling slope limitation
- Standard high quality enamel



## Which kind of industry can use this product?

**Pharmaceuticals and Fine chemicals** 

### Questions? We are here to help.

If you'd like to talk with a sales representative about purchasing De Dietrich Process Systems's products and services, you can reach us here.

