

## THE OPTIMIX® SOLUTION

### THE DE DIETRICH® INNOVATION TO OPTIMISE YOUR PROCESSES

Enhance your future reactor with our (patented) innovation **OptiMix®**!

#### REAL PRODUCTIVITY GAINS

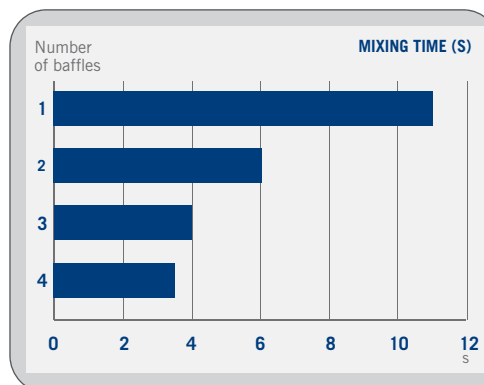
An experienced success with more than 1,000 OptiMix® reactors from 25 to 60,000 L already up and running.

**AGITATOR + BAFFLES = EFFICIENT MIXING**



Depending on their capacity, our OptiMix® reactors are fitted with 1 to 3 rows of 3 baffles welded to the wall.

#### Circulation flow **X 6**

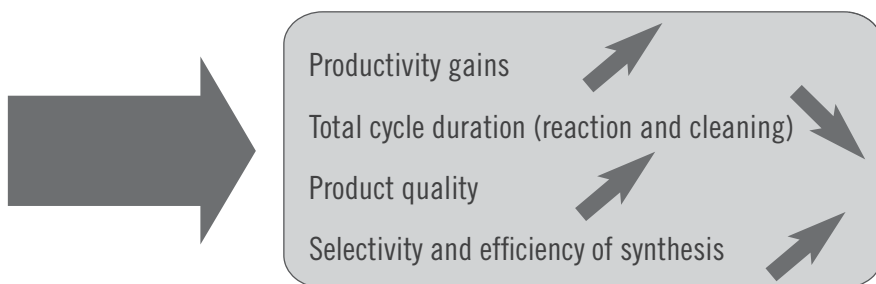


Changes in pump flow and mixing time depending on the number of baffles (calculated for an OptiMix® of 1600 liters)

## ADVANTAGES OF OUR OPTIMIX® SOLUTION

### Optimisation of your processes:

- Pumping and turbulence flow rate
- Heat exchange
- Chemical kinetics
- Transfer of material
- Solids suspension
- Thermal and chemical homogenisation
- Gas-liquid dispersion
- Liquid-liquid emulsion



### Optimised cleaning:

- No more pendular baffles and therefore no "dead zone" very difficult to clean
- No more vortex or splash and therefore no deposits on the hot wall above the surface of the liquid
- OptiMix® baffles are welded away from the walls: no deposits behind

### And here are a few more significant advantages:

- All nozzles are free (no more conventional beavertail baffle)
- High quality standard 3009 enamel
- Less stress on the agitator, increasing the life span of the mechanical seal

### OptiMix® is also a De Dietrich® innovation for temperature measurement



**Temperature is measured** by a probe welded into the knuckle radius (patented):

- Lower min. temperature measurement volume
- Accurate measurement
- No influence from the double jacket
- With our standard SVR 2 probe (2 x Pt 100 Ohms)



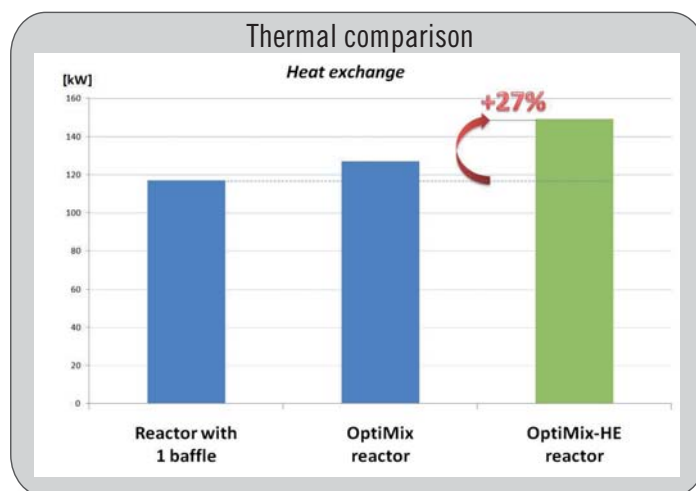
## THE OPTIMIX® - HE SOLUTION

The latest addition to our OptiMix® range is the **OptiMix® - HE**, fitted with **HEATED / COOLED** baffles welded to the wall.

This new design allows the thermal fluid to circulate in the coil and through the **OptiMix® - HE** baffles (single fluid only).

### ADVANTAGES OF OUR OPTIMIX® - HE SOLUTION

- A 15% to 27% increase in the exchange surface depending on the size of the reactor
- Even more homogeneous, faster heat control and shorter processing duration.



Reactor DIN 1000 l.  
with half-coil,  
agitation 110 rpm,  
sulphuric acid,  
thermal fluid 150°C

