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Using computational fluid dynamics to analyze the performance of the Maxblend impeller in solid-liquid mixing operations

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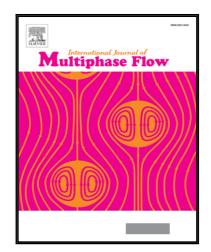
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Highlights

- CFD model provided detailed insight into the particle distribution within the stirred tank.
- Optimal stirrer speed was determined as a function of operating conditions.
- Use of baffles significantly improved the solid suspensions with the Maxblend impeller.
- Physical characteristics of solid particles greatly influenced the local mixing quality.
- Effect of the radial concentration gradients was not significant for the Maxblend impeller.



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