High efficiency gas dispersing impeller

EKATO PHASEJET

Gas/liquid reactions, bioreactors, gassed suspensions

Industries

- Chemicals
- Food
- Hydrometallurgy
- Pharmaceuticals

Applications

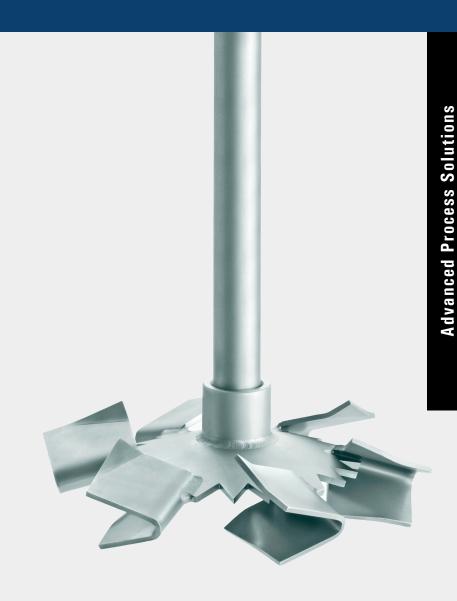
- Fermentation
- Hydrogenation
- Oxidation
- Alkoxylation
- Hydroformulation
- Carboxylation

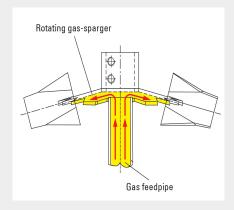
Benefits

- Fixed speed during gassed and ungassed conditions
- High flooding limit
- Optimized mass transfer
- No risk of plugged sparger rings

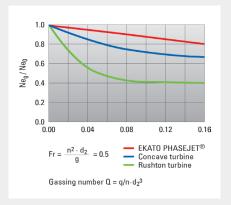
Features

- Radial flow impeller
- Primary gas disperser
- Operates with and without sparger ring
- High suspending performance even at high gas flow rates
- Almost no reduction of power under gassing conditions









Setup without sparger ring

Rubber coated PHASEJET

Minimum power drop under gassing

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The PHASEJET impeller eliminates the disadvantages of a Rushton turbine. The impeller allows a cost-effective agitator design at constant speed due to its low power drop under gassing. At the same time, the impeller can handle more than double the gas rates without flooding compared to a Rushton turbine. Furthermore, the impeller ensures a good homogeneity in the process medium, even at high gas flow rates in combination with a high mass transfer capability.





Finite-Element Analysis for reliable operation