

EKATO VARIOBLADE

Efficient blending and heat transfer over a wide viscosity range

Advanced Process Solutions

Industries

- Chemicals
- Plastics and rubbers
- Resin emulsions
- Biochemicals

Applications

- Polymerization
- Multiphase reactors
- Hydrolysis / digestion
- Reactions with high heat transfer requirements

Benefits

- Short blend times
- High heat transfer capabilities
- Controlled local shear
- Significant power savings compared to grid-type impellers

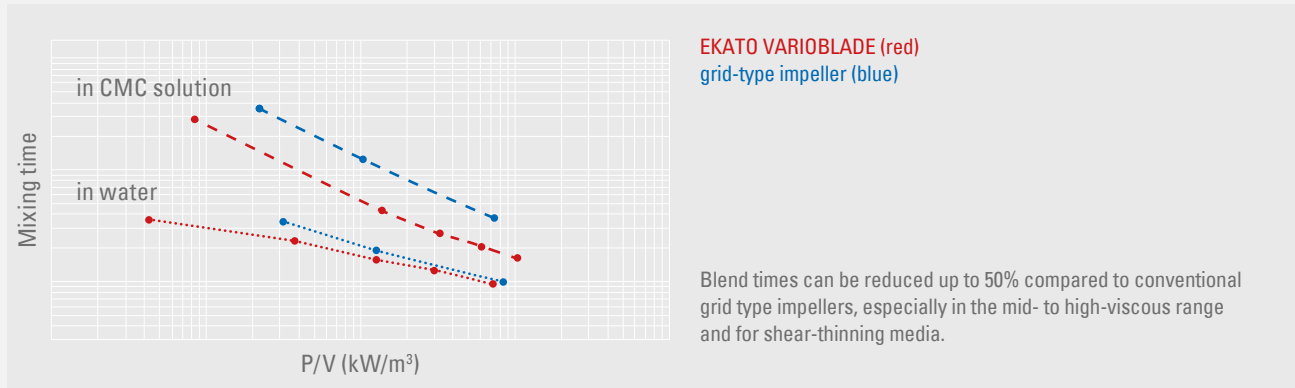
General features

- Flexible, segmented design
- Efficient axial pumping by inclined outer blades
- Radial pumping at the bottom
- Controlled surface entrainment



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Mixing time over power input



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Benefits

The VARIOBLADE is a flexible, modular impeller with an optimized split between axial and radial flow components by different shapes of the upper and lower impeller parts. Compared to standard frame- or grid-type impellers, blend times and heat transfer can be significantly improved. Gas entrainment and shear can easily be controlled, as the impeller can be customized to the corresponding application.



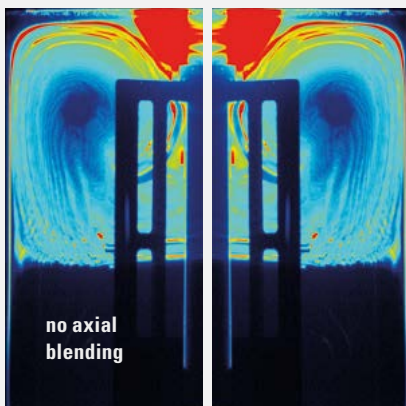
grid-type impeller



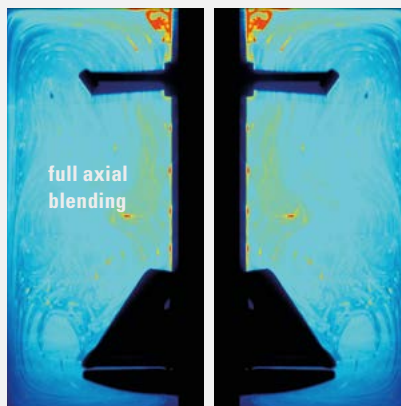
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The VARIOBLADE facilitates control of the process and enables significant energy saving.

Easy revamping of reactors with grid-type impellers.



Mixing a tracer into a viscous shear-thinning CMC solution investigated with laser-induced fluorescence (P-LIF)



see the video
on our website