

High efficiency gas dispersing impeller

EKATO Combined Gassing Systems

Gas/liquid reactions with pure gases

Industries

- Chemicals
- Pharmaceuticals
- Hydrometallurgy

Applications

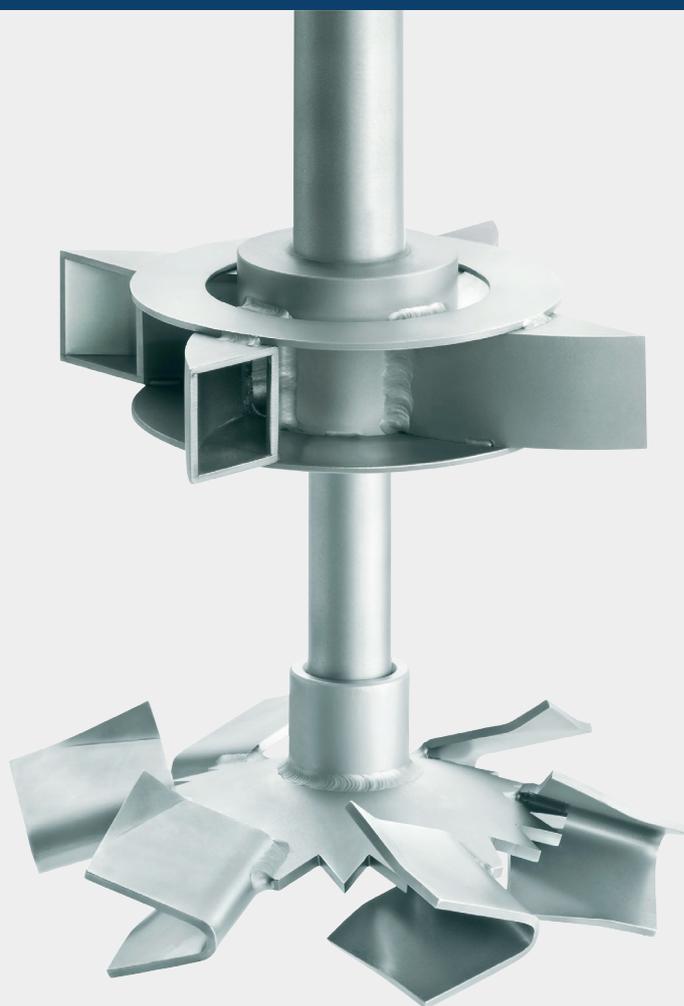
- Hydrogenation
- Oxidation
- Alkoxylation
- Amination
- Carboxylation
- Chlorination

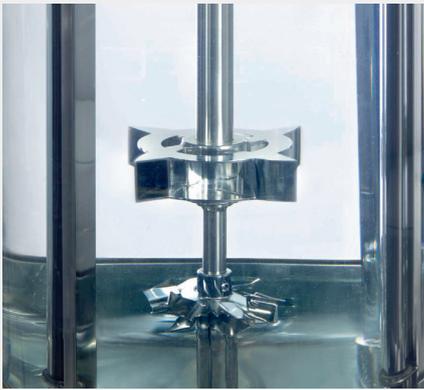
Benefits

- High mass transfer capability
- High operating safety and reliability
- Complete utilization of process gas
- Minimum number of components
- No external recirculation equipment

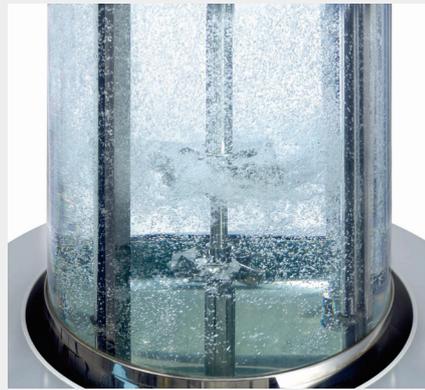
Features

- Self-aspirating impeller
- Reliable containment of the whole reactor content
- Homogeneous suspension of catalyst
- High productivity
- Batch-wise and continuous operation
- Combines internal gas recirculation with high gas rates





General setup



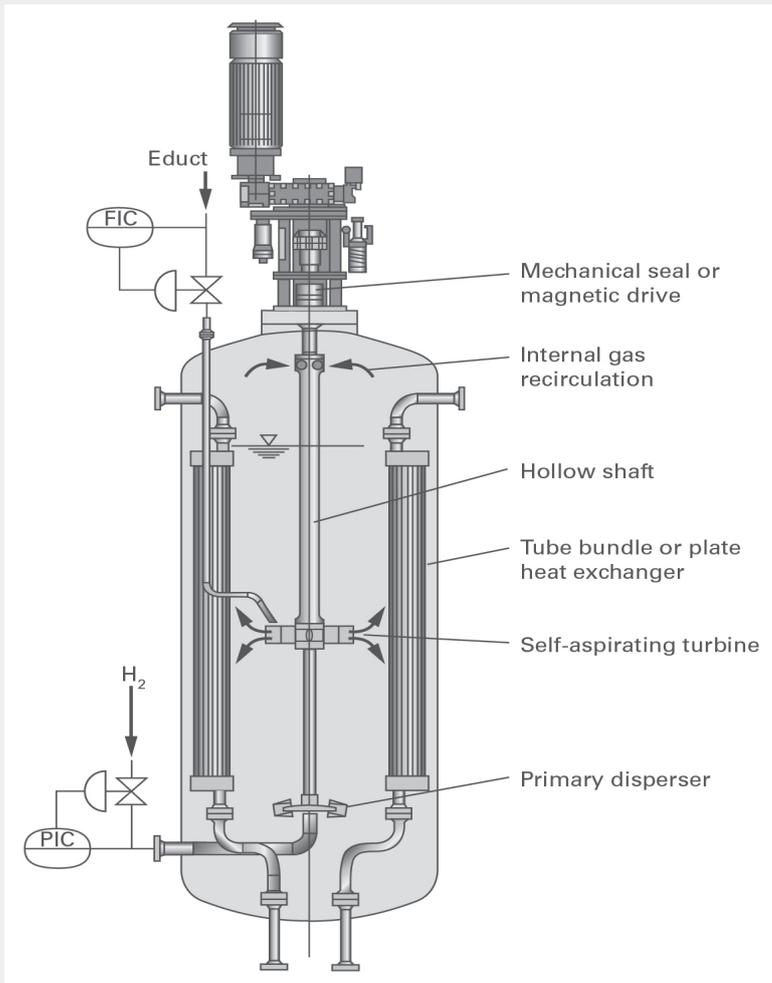
Low speed, start of aspiration



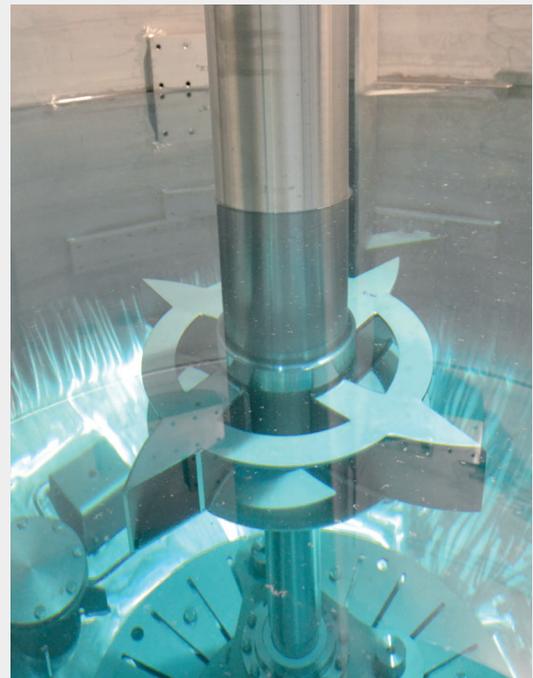
Full gassing at regular speed

EKATO Combined Gassing

The combined gassing system boosts the conversion rate of mass transfer limited reactions. Unconverted gas in the headspace is recirculated into the reaction media leading to a complete utilization of the reaction gas. A safe inclusion of the reaction media is ensured since external recirculation is not needed. In continuous reactors, an intensive mixing of educts and gas takes place in the discharge zone of the GASJET.



Scheme of an hydrogenation reactor



EKATO GASJET impeller