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
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.