# **EKATO**

# **EKATO Lab Impellers**

Customized high performance impellers for optimized process results



## **Tailor made impellers (examples)**



 EKATO COMBINED GASSING for high performance hydrogenations



• EKATO VISCOPROP multi-purpose impeller



 EKATO PARAVISC for efficient blending over a wide viscosity range

### **EKATO Lab Impellers**

EKATO's specialists can facilitate the design and planning of your process development trials for data analysis and scale-up to plant scale. EKATO has extensive process know-how for complex and challenging process conditions including 2- or 3-phase systems. You can benefit from this vast knowledge base and experience gained over many years of developing and implementing innovative mixing technologies. We can support you already in the lab size.

Trials in the lab scale will provide meaningful results if the impellers used correspond to those of the production plants. 3D - printing of the impellers is the state-of-the-art response to these requirements:

- Accurate geometric similar to the full scale
- Flexible in size and material of construction
- Well understood hydrodynamic properties

#### **Materials of construction (MOC)**

All relevant materials are available

- Stainless steel
- Stainless steel and bronze
- Aluminum
- Titanium
- Polymers like polyamide, ABS, ...
- ..

## **Typical lab sizes**

- For vessels up to  $\sim 10$  l volume
- Impeller diameters up to ~ 150 mm or 6"

#### **Features**

- 3D printed
- Exact geometric similarity (lab to process scale)
- Variety of different impellers
- Many different materials available
- Short delivery time (dep. on MOC)

#### Our service

Support from EKATO mixing specialists:

- Supply of lab impellers tailor made for your laboratory facility
- Assistance for test plans
- Support in evaluation of results
- Scale-up expertise

