

**EKATO**

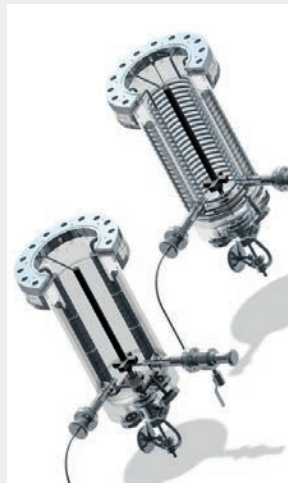
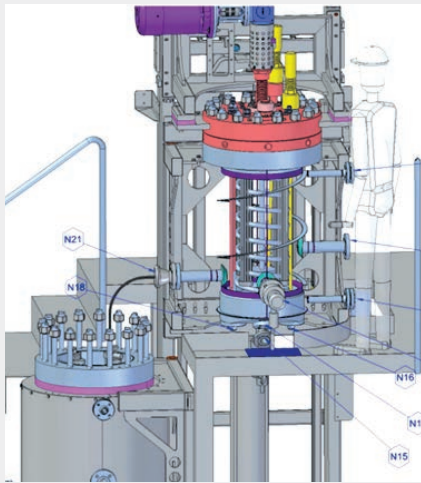
EKATO HYDROGENATION TEST CENTER

## **EKATO Hydrogenation Test Center**

Bring your hydrogenation faster to commercial scale – with less risk and lower costs



**Advanced Process Solutions**



## Plant features

- Working volume: 60 litres
- Temperatures: max 250°C
- Pressure: max 100 barg
- EX classification: T4, IIC
- Product wetted parts: Alloy C22 or coated
- Sampling device
- Reactor heat transfer by wall, coils or bundles
- Prepared for online process probe (e.g. FTIR or UV)

## EKATO Hydrogenation Test Center

Our Hydrogenation Test Center is designed to bridge the gap between bench-scale chemistry and commercial manufacturing. The flexible plant concept allows us to examine and optimize your hydrogenation process with original raw materials under real operating conditions in pilot scale. The goal is to produce reliable test results for scale-up and development of a production process in an economical and timely fashion.

Our engineering team will apply obtained knowledge for the design of a full-scale hydrogenation plant which is tailored to meet your specific process requirements. Therefore, we pave the way for an efficient and risk mitigated investment in the new construction or the rebuilt of a hydrogenation unit.

## Our service

- Development of industrial hydrogenation processes
- Assessment of process and product data
- Process optimization & scale up
- Warranties for key performance parameters
- Analytical Services (density, viscosity, GC, HPLC)
- Assessment of filtration
- Definition of catalyst separation system
- Sizing of catalyst filter

## Agitation systems for

- Minimum batch times
- Optimized mass transfer
- Efficient solid suspension
- Effective heat transfer

## Raw material and reaction types

The EKATO hydrogenation reactor is specially designed for a wide range of hydrogenation processes like:

- Amines from aliphatic or aromatic nitro compounds
- Amines from nitriles
- Alcohols from aldehydes and ketones
- Saturation of double and triple bonds
- Saturation of aromatic rings
- Hydrogenation of resins

## EKATO – Hydrogenation Reactor

