

# ELA 5 PROCESS DEVELOPMENT REACTOR

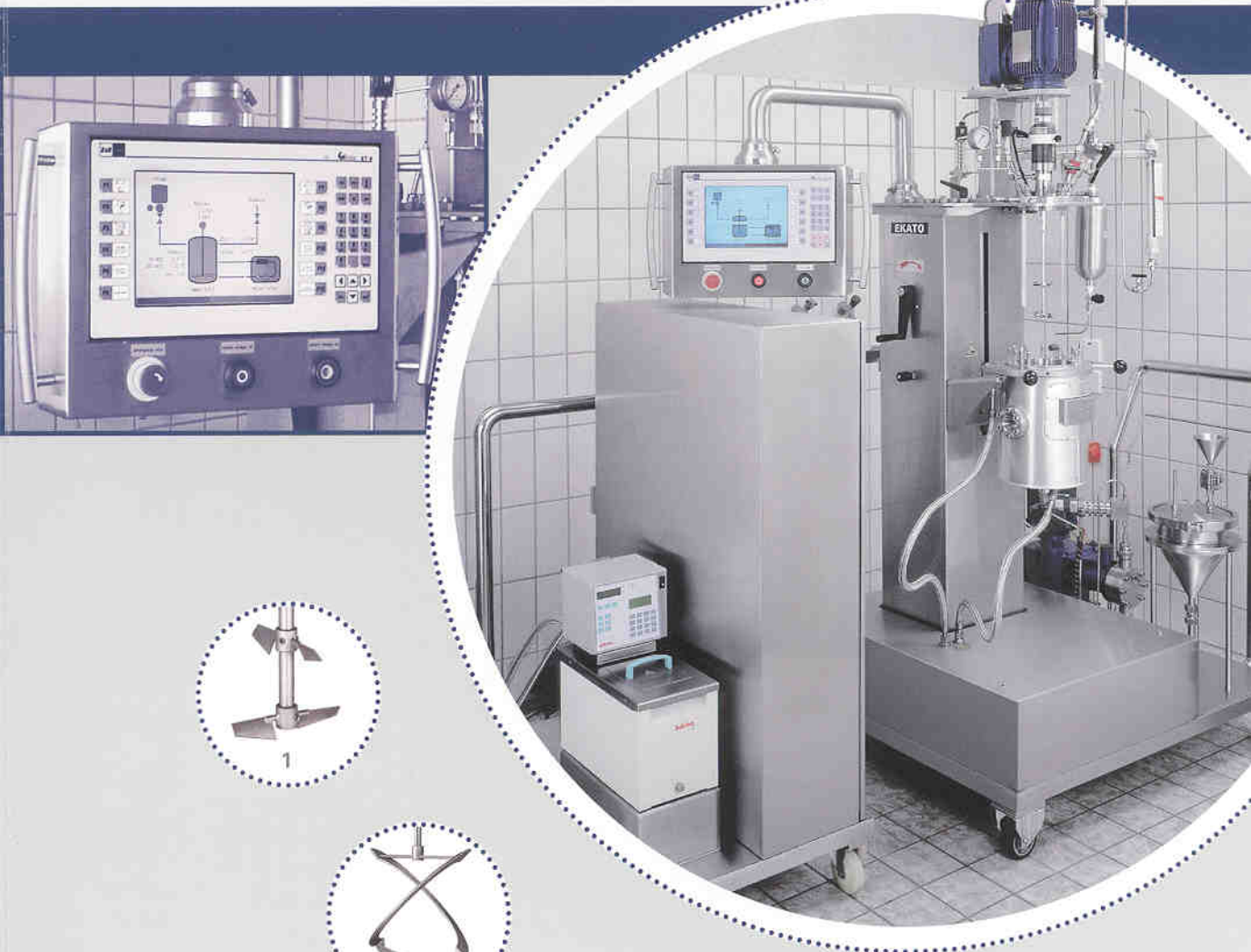
Mixing Technology Fluids and Solids



EKATO

## EKATO ELA 5 – Process Development Reactor

The ELA 5 is a Process Development Reactor where reactions can be performed in well defined fluid dynamic conditions. This provides significant advantages for laboratory process development studies. Data from trials can be directly used for design of production-scale plants using the known performance characteristics of the agitator systems. The design includes the vessel, agitator, EKATO impellers, baffles, control system and heat transfer system.



### EKATO Impellers

- 1 EKATO VISCOPROP
- 2 EKATO PARAVISC
- 3 EKATO INTERMIG
- 4 EKATO PHASEJET
- 5 EKATO GASJET

## Broad operating conditions

- Total volume up to 1.2 Gal
- Liquid feed rate up to 0.12 Gal/min
- Gas feed up to 57 scfh
- Temperatures: 70 to 480°F
- Pressure: vacuum to 1500 psi
- Viscosities: 1 to 10,000 cps

## Process types

- Batch or semi-batch, single or multi-phase, across a wide range of processing conditions e.g.:
- Polymerizations
  - Gas-liquid reactions
  - Heterogeneous catalysis

## Automation, monitoring and facilities

- Gas and liquid feeds
- High pressure sampling
- Overhead condenser
- Temperature and pressure monitoring
- Reaction monitoring and control

### Mixing Technology Fluids and Solids



EKATO's mixing laboratory

## Our service

- Support from EKATO mixing specialists
- Technical back-up from EKATO's mixing laboratory
- Scale-up expertise
- Guarantees for key process parameters

## Characterized agitation systems for

- Minimized mixing times
- Maximized mass transfer
- Efficient solids suspension
- Effective heat transfer

## EKATO provides a complete service package

EKATO's specialists can facilitate the design and planning of your process development trials and provide support for data analysis and scale-up to plant scale. EKATO has extensive process know-how for complex and challenging process conditions such as 2- and 3-phase systems and the processing of highly viscous non-newtonian products. You can benefit from this vast knowledge base and experience gained over many years of developing and implementing innovative mixing technologies.



## EKATO Corporation

700C Lake Street  
Ramsey, NJ 07446  
USA

Phone: 201-825-4684  
Fax: 201-825-9776  
e-mail: [info.vus@ekato.com](mailto:info.vus@ekato.com)

 [www.ekato-usa.com](http://www.ekato-usa.com)



### America

Argentina  
Brazil  
Canada  
Chile  
Jamaica  
Mexico  
USA  
Venezuela

### Europe

Austria  
Belgium  
Bulgaria  
Croatia  
Czech. Republic  
Denmark  
Finland  
France  
Germany  
Greece  
Great Britain  
Hungary  
Ireland  
Italy  
Netherlands  
Norway  
Poland  
Portugal  
Slovakia  
Spain  
Sweden  
Switzerland

### Africa/Asia/Australia

Australia  
China  
Egypt  
Hong Kong  
India  
Indonesia  
Iran  
Israel  
Japan  
Malaysia  
Pakistan  
Philippines  
Saudi Arabia  
Singapore  
South Africa  
South Korea  
Taiwan  
Thailand

# EKATO