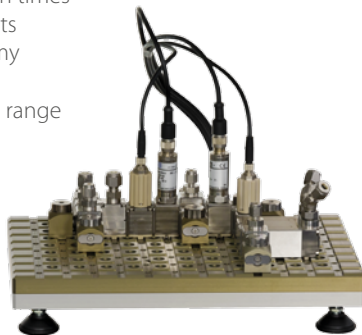


## MicroLAB™

The desktop laboratory plant

- » Extremely short retention times
- » Avoidance of by-products
- » Robust against exothermy
- » Modular design
- » Comprehensive module range
- » Project module library for simple automation project generation



## PiloClave™ & HiClave™

PiloClave™ pressure reactors offer:

- » Volumes from 0.5 to 128 litres
- » Surface finish of up to  $Ra < 0.8 \mu m$
- » Pressures from -1 to 150 bar
- » A mechanical shaft seal or a magnetic stirrer seal
- » With any stirrer geometries
- » Optional version according to GMP guidelines



HiClave™ high pressure reactor systems:

- » Volumes from 10 to 250 ml
- » Operating pressures of up to 350 bar (opt. 400 bar)
- » Metal sealing (without sealing ring)



Both product lines are temperature controlled from -10 °C (opt. -60 °C) to 350 °C (opt. 400 °C).

All reactors are made of stainless steel such as 1.4571 (opt. Alloy 59 or Hastelloy®).

## GraviDos®



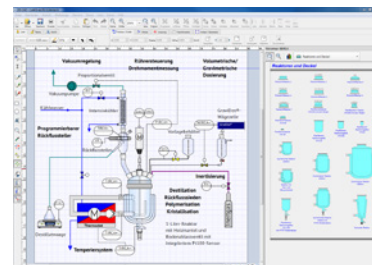
The GraviDos® robust dosing system works without pumps.

- » Gravimetric dosing
- » Tank level measurement
- » No pump required
- » Optional:
  - › Heated
  - › Stirred
  - › Inerting
  - › Automatic refilling

## RI-CAD™

RI-CAD™ was developed especially for drawing norm compliant P&I diagrams.

- » EN ISO 10628 library
- » Glass and laboratory devices library
- » Electric diagram library
- » DXF import/export (optional)



The libraries can be extended by custom graphic objects. Free-of-charge version for educational purposes available!

Computer-Aided Design

## Re-Engineering, Services & Maintenance



Your plant control is outdated, you run your processes manually and want to have more time for your core capabilities?

As a competent partner for automation we can offer you a wide range of solutions. Please talk to us!

From planning to training

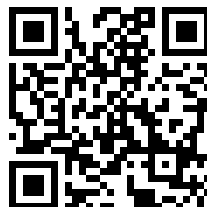
- » Planning and projecting
- » Plant automation
- » Reconstruction and modernisation
- » Order programming
- » User training

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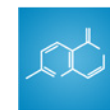


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Fax: +49 (0)2407 / 910-1099  
E-Mail: [info@hitec-zang.com](mailto:info@hitec-zang.com)

Contact



The Leading Edge  
of Laboratory Automation

## LASmanager®

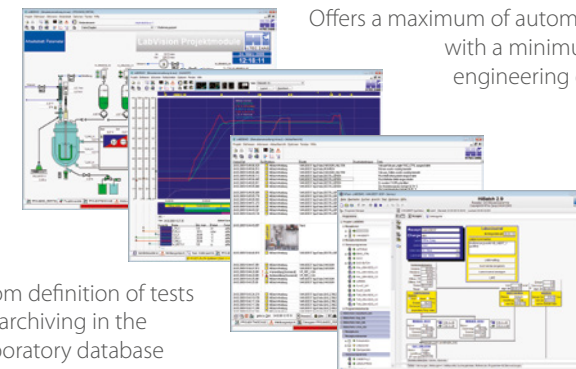
The industrial standard for automation of laboratory plants, miniplants and pilot plants

- » Easy handling
- » Modular design
- » Highly precise, e.g. temperature measurement with 1 mK resolution
- » Extremely adaptable, compact and robust
- » Comfortable NAMUR connection technology
- » Scalable from 4 up to 3,040 inputs/outputs
- » Also available as a fully compatible top hat rail system (DC-Manager™).



## LASVision®

Automation software, fully integrated and intuitive to operate



Offers a maximum of automation with a minimum of engineering effort

From definition of tests to archiving in the laboratory database

Automation Technology

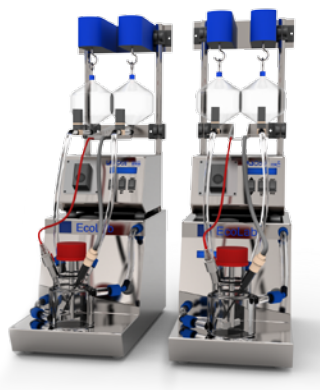
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Microreaction Technology

## EcoLAS™

Flexible parallel reactor systems

- » Particularly suitable for crystallization screening
- » Easy and fast handling
- » Compact design
- » Integrated solid-state temperature control
- » Modular and flexible design
- » High precision temperature control

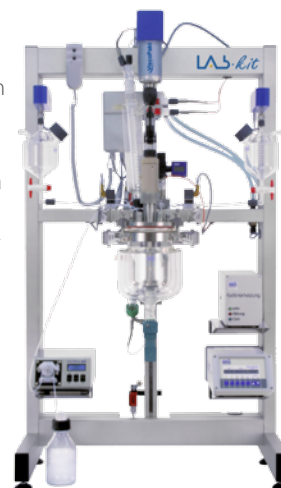


## LABkit™-rc

LabKit™-rc is a reaction calorimeter with a sophisticated configuration for heat flow and heat balance calorimetry.

The system is suitable for syntheses in a temperature range from -40 up to +200 °C. It is expandable with additional modules and components.

- » Isothermal, isoperibolic and adiabatic operation mode
- » Fully automated laboratory reactor system functionality
- » Comfortable evaluation
- » Open expandable system with easy handling



## LABkit™

Reactor systems and reaction calorimeters for laboratory, miniplant and pilot-plant made from glass, stainless steel, Hastelloy® and special materials.

- » Single and multi reactor systems
- » Universally applicable
- » Fully automated
- » Versatile extension
- » Customised solutions



## ViscoPakt®

Laboratory and measurement stirrers

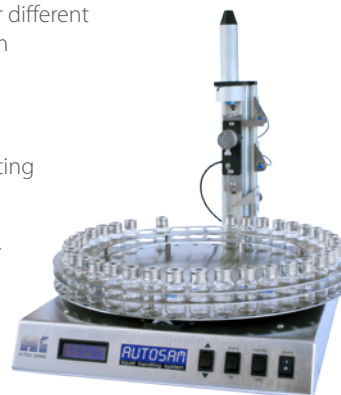
- » Precision torque measurement
- » High performance and compact design
- » High measurement accuracy
- » Mechanically robust
- » In situ viscosity measurement
- » Reaction tracing
- » Scale-up



## AUTOSAM™

Automatic sample collector, four different models with sample bottles from 1.5 ml to 2,000 ml are available

- » Bottling of samples
- » Submission of educts
- » Quenching, mixing and diluting
- » Liquid handling
- » Optional:
  - › Integrated magnetic stirrer
  - › Cooling incubator
  - › Heater
- » Freely programmable methods with LiquiMaster™ software



## SciBot™

Customised laboratory robots

- » Cell culture in microtitre plates
- » Flexible liquid handling platform
- » Additional sensor and actuating systems can be integrated
- » Easy integration into up- and downstream applications
- » Simple programming via hteMaster™ software
- » Optional:
  - › Tool changer
  - › Miscellaneous tools
  - › Sterilisable (24 h / 90 °C)



## LASDos®

The universal dosing pump

- » High media resistance
- » Low pulsation conveying
- » Selectable conveying direction
- » Calibration possible in mg/min and ml/min
- » Highly precise drive
- » Easy to clean and maintain
- » Robust and compact stainless steel casing
- » Controllable via serial interface or manually



## SyrDos™

High-precision syringe doser

- » High media resistance
- » Wetted parts: glass, PTFE and Kel-F, optional ceramics
- » Syringes from 25 µl up to 50 ml
- » 48,000 steps per stroke
- » Optional:
  - › Continuous conveying with shock-free changeover
  - › Overpressure shutdown
  - › High pressure up to 90 bar
  - › Dispensing push-button



## SoliDos®

Solid dosers for dosing, portioning and filling

- » For powder, granules, crystals, chips etc.
- » Chemically resistant
- » For mounting on an NS29 socket or as a desktop unit
- » Optional:
  - › Stand-alone version
  - › Vacuum- and pressure-resistant design

