

## **MICROINNOVA PLANT TECHNOLOGY**

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### **LAB AND PILOT PLANTS FOR PROCESS DEVELOPMENT**

Continuous laboratory plants with micro chemical devices are assembled at the site of Microinnova. The plants are highly automated, which permits doing a great number of experiments in a short time. The standard plant is provided with the Microinnova process control rack and the MPDS software (Microinnova Process Development Software), which is a very flexible process control solution developed by Microinnova. The design of the plant is defined by the customer and its processes. Plants vary from very simple designs for one step synthesis to complex multistep and/or multiphase processes with integrated online analytics, automated valves and cGMP compliant design. All plants are CE-certified and optionally cGMP compliant.

### **MAIN DRIVERS FOR THE USE OF THESE PLANTS**

The most important driver is the development time save of about 30 %. This saving is generated by changed development process. Chemists and chemical engineers develop the process interactively by means of a development plant in the lab. Further savings can be generated by using online analytics. The pharmaceutical industry can cut out their kilo-labs, this the plant can provide material for the toxicological tests. Other reasons are for example an optimized mass and heat transfer, the possibility of new process windows handling of corrosive, toxic and/or explosive reactions, or higher yields/ selectivities. Small quantities for customer sampling or early market supply can be produced.