

## Continuous Flow Production – 10 years of progress

### **Abstract:**

We started 10 years ago with micro fluidic systems. While successful in the development from batch to flow on lab scale further scale up to pilot and production levels did not materialize.

To be able to serve the Speciality Chemicals Industry with flow solutions the capability to employ “Plug & Produce” pilot and production scale skids was identified and so we developed a range of dynamic flow reactors, the SpinPro reactors, to fit into this template approach.

Next to the right reactor type and size the selection of pumps, controls and software (all in compatible, ready to deploy units) showed to be essential for the successful implementation of continuous processes at our customers.

Key drivers for going to flow processes from batch ones are:

- + Excellent mass transfer (excellent mixing)
- + Optimized heat transfer
- + Increased safety
- + Increased yield, lower Opex
- + Smaller footprint, lower Capex
- + Reduced energy use

and: the chemistry must make sense and/or be made suitable for flow!

In the presentation we will focus on the advantages of flow for Organometallic and gas/liquid reactions and share our lessons learned.

Presenter: Wouter Stam. Managing Director Flowid.

Flowid BV  
Achtseweg Zuid 157C, Building TQ  
5651 GW Eindhoven  
The Netherlands  
Phone: +31 (0) 40 3046 279  
www: [flowid.nl](http://flowid.nl)