

## Establishing Micro- and Millireactors worldwide

### Mixing Performance in a Distributed-Feed Plate-Type Reactor

Depending on kinetics, mixing performance of a chemical reactor strongly influences product quality, process costs and safety. One important continuously operated reactor design is the distributed-feed reactor concept consisting of a well-mixing channel design to provide residence time and highly efficient injection points for reagents. However, most of the available studies on milli- and microstructured equipment concerning mixing performance, heat transfer, and chemical conversion were performed with laboratory scale equipment. From the point of view of the industry the scalability of the equipment often remains an open question and more studies with industrial scale equipment are desirable. In this work an ART reactor, a commercially available plate-type reactor system for throughputs up to some hundreds of liters per hour, was chosen and combined with a multinozzle micromixer design. Please read details [here!](#)



### Add-on sealing pack for -40°C

Our Modular MicroReaction System (MMRS) consisting of reactors, mixers, heat exchangers and sensors can be used for a broad temperature range. Due to the possibility of disassembling the modules, O-rings can be exchanged easily. Therefore, we increased our sealing portfolio and now offer a standard pack from -10°C up to 200°C as well as a deep temperature pack starting from -40°C up to 200°C.

Please do not hesitate to ask as for more information around chemical resistance and different pressure stabilities.



### Chemspec Europe 2020

From the 27<sup>th</sup> until the 28<sup>th</sup> of May the Chemspec 2020 will take place in Cologne. This time we will have our new high pressure Miprowa Matrix pilot scale reactor with us at booth E76. This reactor is very useful for reactions like ethoxylations, as it can handle pressures up to 60 bar. As always, this reactor is available in stainless steel or, if needed because of corrosion issues, in Hastelloy.

Please also do not miss our presentation "Go Flow under Pressure – Alkoxylation in Flow Reactors" at RSC symposium on the 28th of

May 13:40 pm in the same hall. In this presentation, we will take a closer look to this market segment of alkoxylation, the requirements for continuous processes and the resulting tasks on behalf of different case studies. Furthermore, we will contrast the benefits and challenges using scalable micro reactor technology with traditional batch technology in this sector.

Looking very much forward to meet you in Cologne soon!

**Please visit us!**

**Booth E76**

If you have any questions, we will be pleased to answer them by phone, email or in a personal meeting. Visit us under [www.ehrfeld.com](http://www.ehrfeld.com) to obtain an initial impression of our technology.

Or meet us in person at the next event:

Chemspec Europe

27<sup>th</sup> – 28<sup>th</sup> of May in Cologne, Germany

12<sup>th</sup> Symposium on Continuous Flow Reactor Technology for Industrial Applications

28<sup>th</sup> – 30<sup>th</sup> of September in Graz, Austria

In case of further questions, please do not hesitate to contact us:

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Kind regards,

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