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Corning unveils new chemical flow processing system for R&D applications

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Offering customers a more flexible way to develop and process chemicals using inherently safer technology



Corning Incorporated has introduced the Corning Low-Flow Reactor System 2 as the latest product line available in its Advanced-Flow Reactor (AFR) portfolio. The Low-Flow Reactor System 2 – featuring a Low-Flow Reactor 2, a Lab Dosing Unit, and a chiller, enables a plug-and-play system that offers flexibility and scalability to help customers develop and process chemicals in a more efficient manner.

The Low-Flow Reactor System 2 supports customers in private, public, and academic laboratories settings with research and development work using inherently safer continuous flow technology.

Corning's AFR team leveraged the company's continuous innovation approach to design the Low-Flow Reactor System 2, which features units that provide seamless scale-up capabilities with the existing AFR portfolio. The Low-Flow Reactor System 2 includes the:

- **Low-Flow Reactor 2** - this solution leverages Corning's glass fluidic modules – featuring the company's "heart-cell" design – which enables outstanding mixing and heat exchange to intensify the chemical reaction. Additionally, the Low-Flow Reactor System 2 offers improved temperature and pressure boundary conditions and a heat exchange system to manage multiple temperature zones. This unit is also fully enclosed, which allows inert gas to flow inside for lower temperature reactions (reduction of fogging) and a reduced risk of corrosion.
- **Lab Dosing Unit** – this latest dosing solution enables a consistent and pulseless flow of reactants or starting materials, which is essential for flow chemistry. This unit features real-time graphing with an easy-to-use touch screen interface to provide an enhanced user experience and delivers high-chemical durability enabled by metal-free processing to support a broad range of reactions.
- **Chiller** – a chiller is included with the Low-Flow Reactor System 2.

AFR customers can now place orders for the Low-Flow Reactor System 2 through Corning's regional sales channels and receive quality after-sale services through Corning's regional technical and commercial teams around the world.

Building on more than 170 years of innovation, Corning AFR is a global leader in end-to-end chemical processing products and services for pharma, fine chemicals, agrochemicals, specialty chemicals, and high-performance materials industries.