

APPLICATION NOTE A083-FP08 - FLOW SOLUTIONS FOR CONTINUOUS PHARMACEUTICAL MANUFACTURING

APPLICATION NOTE

LIQUID FLOW SOLUTIONS FOR CONTINUOUS MANUFACTURING

Continuous Pharmaceutical Manufacturing involves designing a process where the various steps are automated from beginning to end with minimal manual intervention. Continuous manufacturing demands a higher level of accuracy and monitoring of chemical ingredients. This is best achieved by using mass flow measurement and control for liquid additives.

Bronkhorst assisted a leading pharmaceutical company supplying a customised liquid dosing solution with Coriolis mass flow meter and pump for dosing liquid additives. For a **faster**, more **reliable**, and **flexible** process.

Traditionally, most human pharmaceuticals are manufactured in a step by step batch process to ensure consistent quality and efficacy of the finished medicine. More and more manufacturers switch from the traditional batch manufacturing process to a continuous manufacturing process.



Liquid Dosing skid with CORI-FLOW (copyright: ISPE)

Application requirements

To manufacture pharmaceuticals in a continuous way, the chemical reactants need to be added, mixed and transferred in an accurate and repeatable way throughout the entire process. The process was designed to be modular in that it needed to be easy to modify the process by adding and removing process components as required. Process data collection was vital with real time mass flow, densities and temperatures being recorded and archived for regulatory authorities.

Important topics

- Accurate liquid mass flow control
 - Repeatability
 - Flexibility, plug & play
 - Compactness
-



BRONKHORST USA LLC

57 South Commerce Way

Suite 120

USA - Bethlehem, PA 18017

Tel. [+1-610-866-6750](tel:+16108666750)

sales@bronkhorstusa.com