

Bot1 Autosampler for the MFI5000 Series Datasheet



Fully Automated Particle Analysis

Want to streamline your particle analysis process so you can focus on more productive activities? Just add a Bot1 Autosampler to your MFI 5000 series, and you'll get walk-away automation and standardized sample handling.

Increase Throughput

Run up to 90 samples compared to only 30 in a manual run. And since Bot1 eliminates manual labor, you'll have up to 5 more hours of free time!

Standardized Operation

Automated sample delivery removes all the tedious effort of manual sample loading. Plus you'll get rid of variability so you can standardize your sampling process.

Unattended operation

Walk-away automation lets you run all day and overnight. Automated protocols include all wash, rinse and sample handling steps — Bot1 does everything for you.

Your Data, Only More Reproducible

Automated pipetting with liquid level sensing on the Bot1 gives you reproducible and consistent sampling. Take your pick of sampling formats — pipette from 1 or 2 mL deep-well plates and reservoirs.

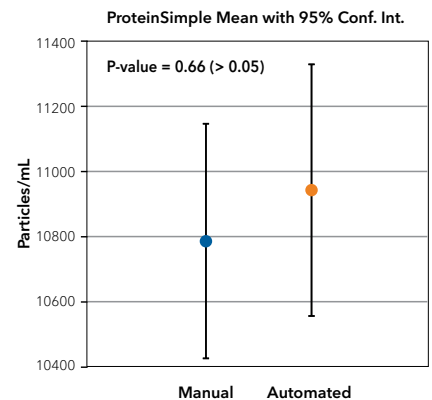
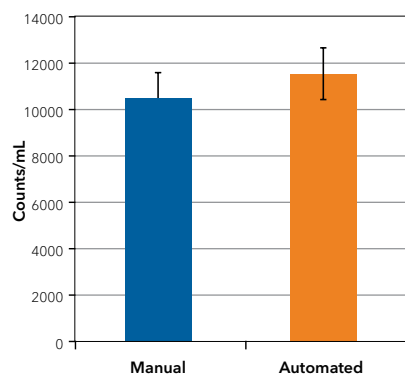
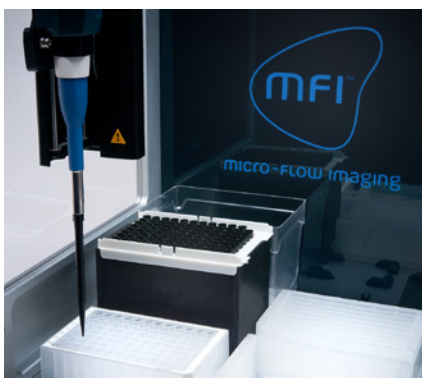


FIGURE 1. Equivalent results for automated or manual sampling formats. Agitated BSA protein samples were tested on a MFI 5200 alone or with Bot1, and showed comparable results for count and concentration, by statistical analysis.

MFI 5000 Series with Bot1 Autosampler Specifications

Use the MFI 5000 Series with Bot1 Autosampler for just about any sample type you may need to analyze.

Parameter	MFI 5000 with Bot1	MFI 5200 with Bot1
Size Range	2 μm to 300 μm - single optical configuration	1 μm to 70 μm - single optical configuration
Sample Analyzed/Volume Dispensed	>85% - entire size range	>85% - entire size range
Depth of Field (DOF)	400 μm	100 μm
Flow Cell Depth	400 μm - DOF matched	100 μm - DOF matched
Analysis Rate	200 $\mu\text{L}/\text{min}$	150 $\mu\text{L}/\text{min}$
Maximum Concentration (@ 2.5 μm)	175,000 particles/mL	150 $\mu\text{L}/\text{min}$
Software for System Operation	MVSS Software (21 CFR Part 11)	
Software for Analysis	MVSS and MVAS Software	
Pipetting Dispense Volume	50 - 1000 μL	
Liquid Level Sensing	Yes	
Pipette Mixing	Yes, using aspirate and dispense	
Automated Cleaning and Baseline	Yes	
Tray Capacity	4 full-size, 2 half-size, or 1 quarter-size SBS module	
Sample Format	1 and 2 mL 96 deep-well plates or reservoirs	
Sample Volume Requirement	Minimum 900 μL *	
Throughput	1-90 samples per day (unattended operation)	
Concentration	1-150 mg/mL for protein formulations	

*Sample volume may be lower based on particle concentration and analysis method.

Need More Information?

Find out how other scientists use MFI to address regulatory questions on particle size, count and classification of biopharmaceuticals at:

https://www.bio-techne.com/resources/webinars/view-all-webinars?tid_1%5B402%5D=402

Bot1 Autosampler for MFI 5000 Series:
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