

HORIBA

AUTOMATION FOR LA-SERIES PARTICLE SIZE ANALYZERS

The perfect choice

for true hands-free

automation,

Horiba's LA-Series

Particle Size

Analyzers.

- AutoSampler
- SlurrySampler
- AutoFill
- AutoReservoir



Fully automate particle size measurement for improved reproducibility, system availability and productivity.

Horiba's highly reliable LA-Series Particle Size Analyzers include a powerful integrated sample dispersion system and flexible software, making them perfect candidates for true hands-free automation.

Adding automation accessories provides all the advantages of continuous, non-stop, unattended operation. These include reduced labor costs, elimination of human error, and exceptionally reliable, repeatable measurements. More frequent checks on production runs or a greater number of variables in a research project can be tested in a shorter period of time. Also, measurement can easily take place during non-peak hours, increasing system availability, and productivity. As a result, users report that the system often pays for itself in three to six months.



LA-300 with AutoFill

AutoFill

The AutoFill, available for the LA-910 and LA-300 (standard on the LA-930), has the same purpose as the AutoReservoir, without the complication and cost of the tank. The system is connected to a fluid source, such as a house DI water system or container of dispersant solution. The AutoFill supplies fluid to the analyzer in response to commands from the computer.



AutoReservoir

Autoreservoir

The AutoReservoir, available for the LA-910 and LA-930, is a three-chamber tank with built-in pump. This unit supplies fluid to the analyzer in response to commands. Concentrated surfactant solutions can be added to two of the tanks, and then be automatically diluted during the fill sequence. This automates the supply of dispersant solution to the analyzer for fill, automatic dilution of samples, and rinses.



Automation

Benefits

Horiba's range of automation options, combined with the capabilities of our full range of analyzers, provides a unique opportunity to automate the particle size analysis task.

No other company can offer such a range of solutions to the customer. These systems are flexible and powerful enough to accommodate any sample requirement, from QC of high-volume production materials to research of new materials, from nanometers to millimeters, and from grams to milligrams of sample. Applications include powders, suspensions, emulsions, or slurries.



AutoSampler

AutoSampler

The AutoSampler, available for LA-910 and LA-930 Systems, is a 24-position carousel that fits on top of the main analyzer unit. As each sample is required for analysis, the carousel advances, drops the sample into the sample chamber; fluid jets rinse the sample cup, and the instrument carries out the sample analysis. Samples can be suspensions, emulsions or dry powders.

LA-920 with AutoSampler



- **Increased sample throughput**
- **Decreased labor cost**
- **Improved reproducibility**
- **Reduced operator error**
- **Increased system availability**

Hands-Free Operation



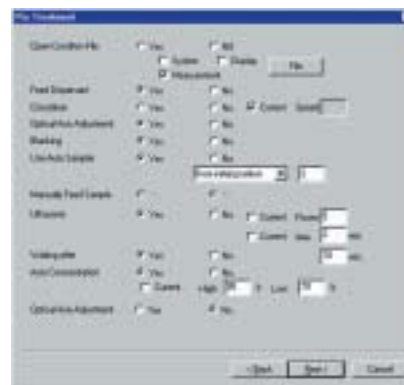
LA-300 with SlurrySampler

SlurrySampler

The SlurrySampler, available for LA-910, LA-930 and LA-300 Systems, is a robotic-arm sampling system that can accommodate up to 60 samples, depending on container size. When prompted by the software, the robotic arm moves to the correct position, mixes the sample, withdraws an aliquot, and adds it to the sampling chamber. Samples can be suspensions or emulsions.

Hands Free Operation

The AutoSampler and SlurrySampler provide seamless automation of the particle size analysis procedure. Simply supply the sample and instruct the system to conduct the pre-configured measurement sequence. It automatically injects the right amount of dispersant, records the baseline, adds sample and adjusts concentration if necessary. Next comes an automatic cycle of circulation, ultrasonic dispersion and measurement. The resulting data is processed automatically for the ultimate in streamlined, efficient measuring. The sample dispersion is then drained and rinse cycles prepare the system for the next sample.

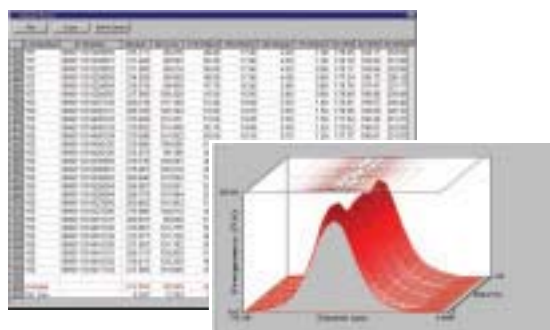


The Sequence Wizard automates the writing of the method files so that new methods can be created simply and quickly. These sequences can also be created for buttons that can be added to the button bar for samples that are frequently analyzed.

After a series of samples are run, the data analysis software can provide a number of reports including configurable summary reports, overlay graphs, and 3-D overlay plots. The data can also be exported to other programs for further analysis.

Simple Operation: Three Steps, One Button

Horiba's powerful software makes routine operation of either sampler system extremely easy and simple. The AutoScheduler is as simple as filling in a spreadsheet. A Condition and Method file are selected from a list, the sample name and the file name are entered, and one button starts the analysis. The SlurrySampler is just as simple, with the ability to select the sample position.



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