

Automated sample preparation and viscosity measurement

FLEX VISCO



Automatically dispense virtually any product (low to high viscosity liquids, pastes, even melted waxes) and subsequently measure its viscosity with our proprietary overhead gravimetric dispensing technology in combination with our software.

Solution overview

Our proprietary overhead gravimetric dispensing technology in combination with our software allows you to automatically dispense virtually any product (low to high viscosity liquids, pastes, even melted waxes) and subsequently measure its viscosity. Furthermore the concept allows you to measure viscosity virtually everywhere (e.g. formulation vessel, sample vials). In addition, it allows flexible sample conditioning for repeatable high quality measurements.

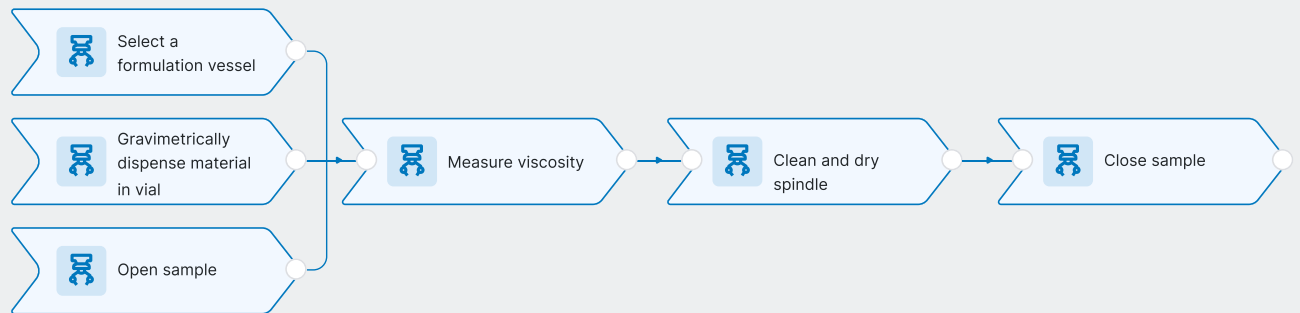
- Self contained environment.
- Automated opening / closing of sample containers.
- Controlled sample parameters while processing (e.g. temperature).
- Range of viscosity measurement.
- Type of viscometry.
- Measuring geometries.
- Cleaning of measuring geometries.

Key advantages & features

- Automated unattended viscosity measurement.
- Easy access to data with a convenient interface to pull results into Excel or virtually any other software.
- Dispensed amount, mixing speed, temperature, time..., and other data stored in a read-only log file.
- Enhanced efficiency and productivity.
- 3 minutes per sample.
- Decrease in cost per sample up to 90%.
- Increase in productivity by a factor of 10.
- Perfect sample conditioning especially for quality control.
- Interface to DOE / AI.
- Expand your workflow capabilities (e.g. viscosity adjustment, density, pH, mixing, powder dispensing and many more possibilities).

Example workflow

Chemspeed solutions can be configured to your exact workflow; here is an example of our high throughput viscosity measurement workflow.



An integrated Brookfield viscometer measures samples on the FLEX VISCO.



Accelerating your existing workflows

This example solution showcases one possible workflow using Chemspeed's technologies, but the possibilities are almost endless. Building your ideal platform has never been simpler with Chemspeed. From powder dispensing to chromatography, our configurable solutions are modular and constructed to suit your exact needs.

Combine a Chemspeed base platform, robotic tools from our extensive library, reactors, vessels, racks, vials and software to create a system that compliments and enhances your workflow.



Platforms

House your chemistry instrumentation in a solid platform. The nature of your project will decide the scale of system you require. Chemspeed offer three highly-versatile platforms as the basis for every possible instrumentation to be housed in: SWING, FLEX and FLEXSHUTTLE.



Tools

Chemspeed's extensive tool library contains more than 70 robotic tool-features that can be integrated with Chemspeed's unique robotic tool exchange technology, including unrivalled overhead gravimetric dispensing, which can operate while mixing, heating, refluxing and cooling. Virtually any combination of these robotic tools is possible.



Software

Quickly design, execute, analyze and report experiments with our AutoSuite software. Coordinate and orchestrate larger laboratory workflows with ArkSuite, or even digitalize your entire workflow, including manual tasks, using ArkSuite Sofia.

Automate and digitalize your laboratory with Chemspeed.

