

Automated versatile gravimetric solid dispensing

FLEX POWDERDOSE



Chemspeed's FLEX POWDERDOSE with its proprietary overhead gravimetric solid dispensing / dosing (mg to g) and our user-friendly software allow you to automatically dispense virtually any powder / solid and extrudate into any type of destination.

Solution overview

Chemspeed's FLEX POWDERDOSE deck modularity allows the user to execute and perform a variety of sample preparation workflows in a fully automated fashion.

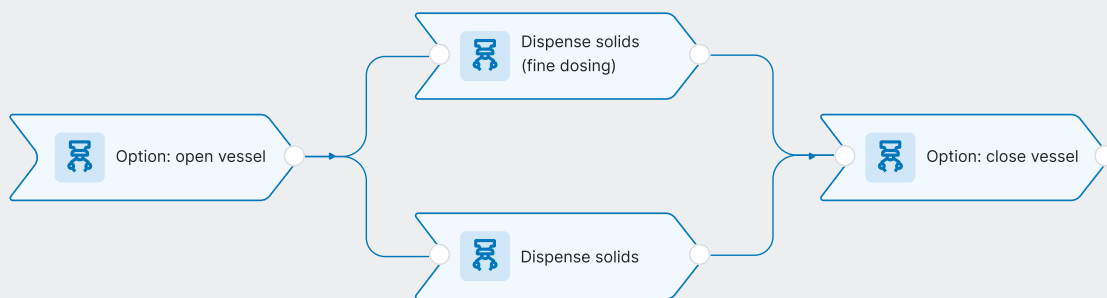
The gravimetric dispensing units (SWILE, GDU-Pfd, GDU-P models) are used to perform automated, gravimetrically controlled dispenses of a wide range of solids in the sub-milligram to multigram scale. The dispensing modules pick the appropriate container, dispense the solids and powders gravimetrically, and then place the container back to its storage position and picks the next one. All dispensing units include an overhead balance and allow dispensing and simultaneous weighing of powders into various vials, tubes, well-plates and / or reactors.

Key advantages & features

- Decrease in cost per sample up to 90%.
- Increase in productivity by a factor of 10+.
- Optimized footprint (3×3 ft, 90×90 cm) versus capacity - all while reducing costs and maximizing return on investment.
- Ventilated hood for safety.
- Gravimetric solid dispensing (low density, sticky, any particle size, spherical or granulates shapes, beads and tablets) into an unlimited choice of vial / plate / reactor formats.
- The balance moves to the destination, increasing speed and efficiency.
- Balance resolution down to 100 µg.
- A large dispensing range, from mg's to 20g
- Dispensed amount, time, and other data are stored in a read only log file.
- Easy access to data with a convenient interface to pull results into Excel or virtually any other software.
- AUTOSUITE software - drag & drop experimentation with easy interface to data analysis.
- Interface to e.g. DOE, ML, AI, LIMS, ELN, ERP.

Example workflow

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



The GDU-P tool dispenses powder into a vial on the bed of the FLEX POWDERDOSE.



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.

