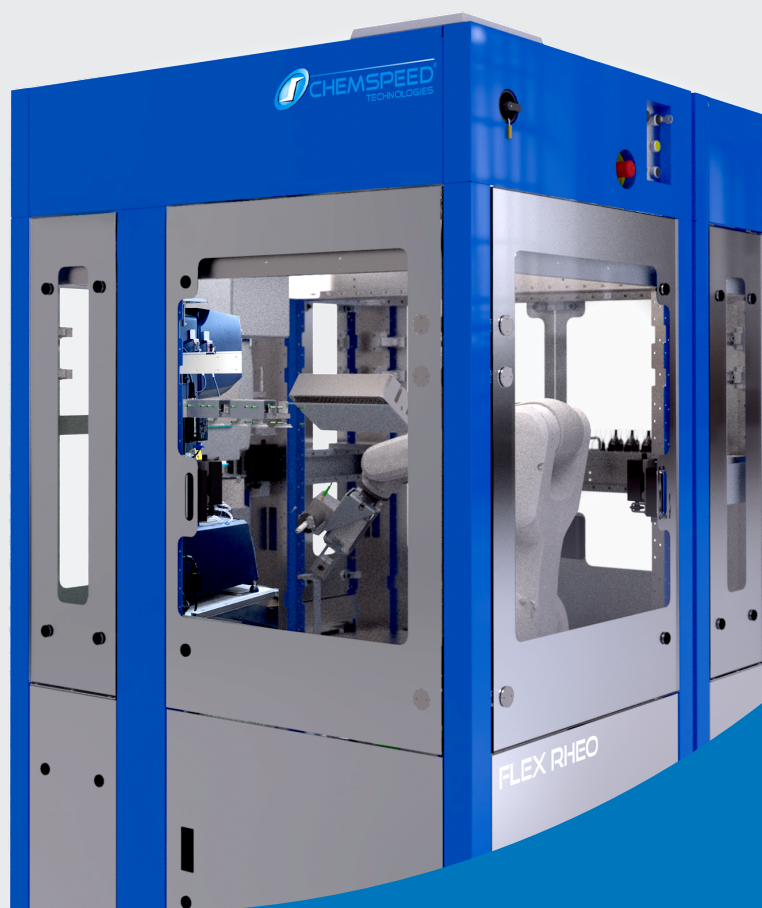


High throughput rheology measurement

FLEX RHEO



Rheology analysis is a powerful tool for material development, processing and quality control. Chemspeed's solution allows fully automated rheology measurements for various workflows.

Solution overview

This solution allows for fully automated rheology measurement with Discovery HR rheometers, or other rheometers, for “Press Start and Walk Away” operation. With optional extras, including robotic pH measurement tool, screw capper and extended storage capacity, this Chemspeed configurable solution transforms the traditional rheology analysis process.

Key advantages & features

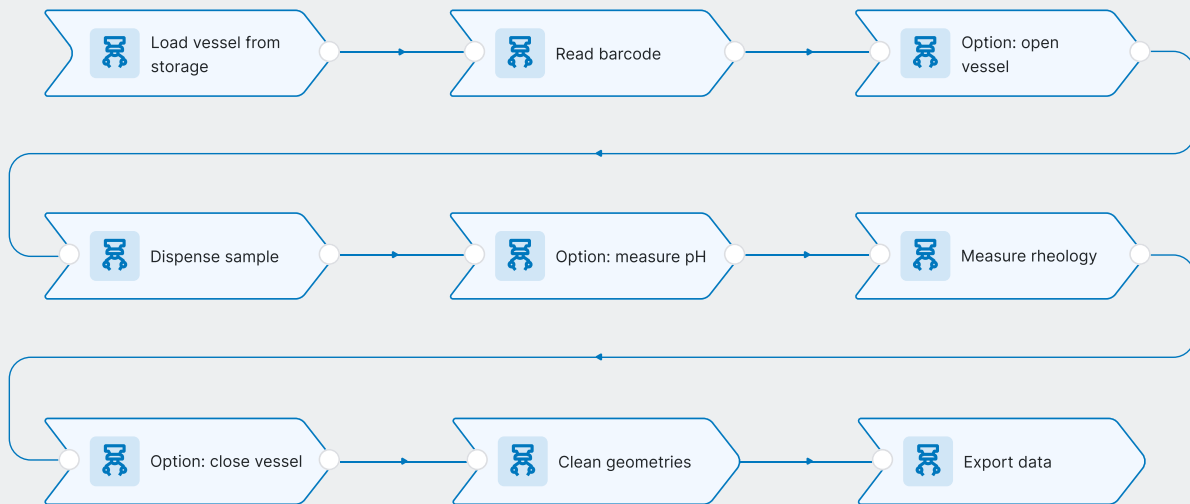
- Increase throughput
- Reduce scientist resources spent for routine work
- Enable unattended operation 24/7
- Optimize costs
- Enhance reproducibility and quality
- Boost innovation
- Anti-vibration setup
- Reproducible sample dispensing
- Active washing of measuring geometries
- Minimized cleaning liquid consumption
- Easy export of data
- Fast integration into lab environment

Specifications

Throughput	50 – 200 samples per day (mainly depending on measurement duration and cleaning requirements).
Dimensions	1.35 m (L) x 1.35 m (W) x 2.2 m (H)
Included tools	<ul style="list-style-type: none">• Multi-axis robot with multigripper and liquid handling tool extensions• Rheometer (3rd party) with parallel plate setup and Peltier setup• Two sets of measuring geometries (two lower plates and two upper plates or upper cones)• Active cleaning of measuring geometries• Storage racks• Barcode reader
Optional upgrades	<ul style="list-style-type: none">• Additional upper measuring geometries for parallel plate setup (upper plates or upper cones)• Automated trimming• Exchange between parallel plate setup and concentric cylinder setup

Example workflow

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



An example of a Chemspeed FLEX unit as part of a larger FLEXSHUTTLE platform



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.

