

The Automated

Benchtop Rheometer

HTR 3000



The Automated Benchtop Rheometer

for High Sample Throughput

Use HTR 3000 to conduct fully automated rheological measurements of up to 250 samples a day with Anton Paar's MCR 102e or MCR 302e rheometers. Fully automated, 24/7 operation means no downtime and maximum productivity.

It's ideal for concentric cylinder and other relative measuring geometries. Automated measurements guarantee highly accurate, reproducible results, and the small benchtop size saves you much-needed lab space.

We combine decades of market leadership in rheology with years of experience in automated rheology configurations. Working with us means working with just one company for your whole measuring system, so you know your instruments and systems are seamlessly compatible.

Although our standard model covers most needs, we offer a range of feature upgrades to meet your requirements and produce individual configurations (e.g., for the automotive, paint, food, and personal care industries). Customized adaptions are available upon request.

FIND OUT MORE



www.anton-paar.com/ apb-htr-3000





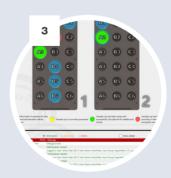
- 1 MCR 102e WITH TEMPERATURE CONTROL UNIT
- 2 CLEANING UNIT FOR UPPER MEASUREMENT GEOMETRY
- 3 HTR 3000 CONTROL SOFTWARE
- 4 3-AXIS HANDLING SYSTEM WITH CUP GRIPPER
- 5 2x SAMPLE RACK
- 6 36x CC27 CUPS











Automotive Configuration

Full Automation, Full Flexibility



Automated measurements reduce your lab staff's workload, letting them focus on more pressing tasks. Use it in your production facility or in your lab, the choice is yours. With HTR 3000, your investment pays off, giving you a quick ROI, too.



More sample storage, more walkaway time

A third sample rack increases your storage capacity from 36 to 54 samples, giving you increased walkaway time and higher throughput. Cups can also be covered with caps to prevent samples from evaporating or being influenced by other outside factors.



Fully traceable and transparent: Barcode scanners prevent errors

A unique data matrix code that's on the bottom of the cups, the scanner, and the integrated code reader prevents errors during cup placement.



Automation saves time

Because it fully automates the measuring procedure and cleaning of the upper measurement geometry, lab staff can focus on other, more important tasks during the day.

Food Configuration Upgraded Features for Food



Designed with the demands of the food industry in mind, this configuration guarantees consistent sample conditions before you conduct measurements and ensures reliable cleaning results of the upper measurement geometry – even for hard-to-clean samples.



Cooled rack for consistent sample conditions

A cooled storage rack for 36 cups keeps your samples at a temperature range of between 8 °C to 25 °C, so certain samples like dairy products don't go bad during storage.



A cleaning station for challenging samples

When it comes to hard-toclean samples, the integrated cleaning unit is upgradeable with a cleaning detergent pump, which ensures the upper measurement geometry is cleaned effectively.



Direct data transfer eliminates errors

Since measurement results are directly transferred to your network storage or LIMS, you save time and eliminate manual input errors.

Personal Care Configuration

Ready for Diverse Samples



This configuration can handle the wide range of samples (e.g., toothpaste, shampoo, shower gel) you use in the personal care industry. With the intuitive and easy-to-handle operating procedure of HTR 3000, you can get your measurements started in just a few, easy-to-do steps.



pH station for additional sample analysis

pH measurements, pH probe cleaning, and reference measurements performance checks – it's all automated.



Pre-tempering unit for increased throughput

An automated Peltier unit pre-tempers the sample before it's placed into the rheometer, shortening the tempering time in the rheometer and increasing throughput.



Priority drawer for urgent measurements

Have a sample that needs to be measured right away? With the priority drawer, load one sample into the HTR 3000 during an ongoing measurement. This sample is then prioritized and measured next.

HTR 3000

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| Throughput | Up to 250 samples a day | |
|------------------------|--|--|
| Storage capacity | Up to 54 samples | |
| Measurement geometry | Concentric cylinder CC10 - CC27; vane geometries and spindles | |
| Dimensions (L x W x H) | Approx. 2000 mm x 800 mm x 940 mm (78.74 in x 31.50 in x 37.00 in) | |
| Weight (net) | 400 kg (882 lbs) | |
| Main supply | 100V - 240V, 16A, 50/60Hz | |
| | | |

Communication interface Export results via CSV files or bi-directional connection to a LIMS system

| | MCR 102e ↓ | MCR 302e ↓ |
|---------------------------|---------------|---------------|
| | | |
| Max. torque | 200 mNm | 230 mNm |
| Min. torque (rotation) | 5 nNm | 1 nNm |
| Min. torque (oscillation) | 5 nNm | 0.5 nNm |
| Max. angular velocity | 314 rad/s | 314 rad/s |
| Max. angular frequency | 628 rad/s | 628 rad/s |
| Normal force range | -50 N to 50 N | -50 N to 50 N |

Reliable. Compliant. Qualified.

FIND OUT MORE



www.anton-paar.com/ service

Our well-trained and certified technicians are ready to keep your instrument running smoothly.



Maximum uptime



Warranty program



Short response times



A global service network