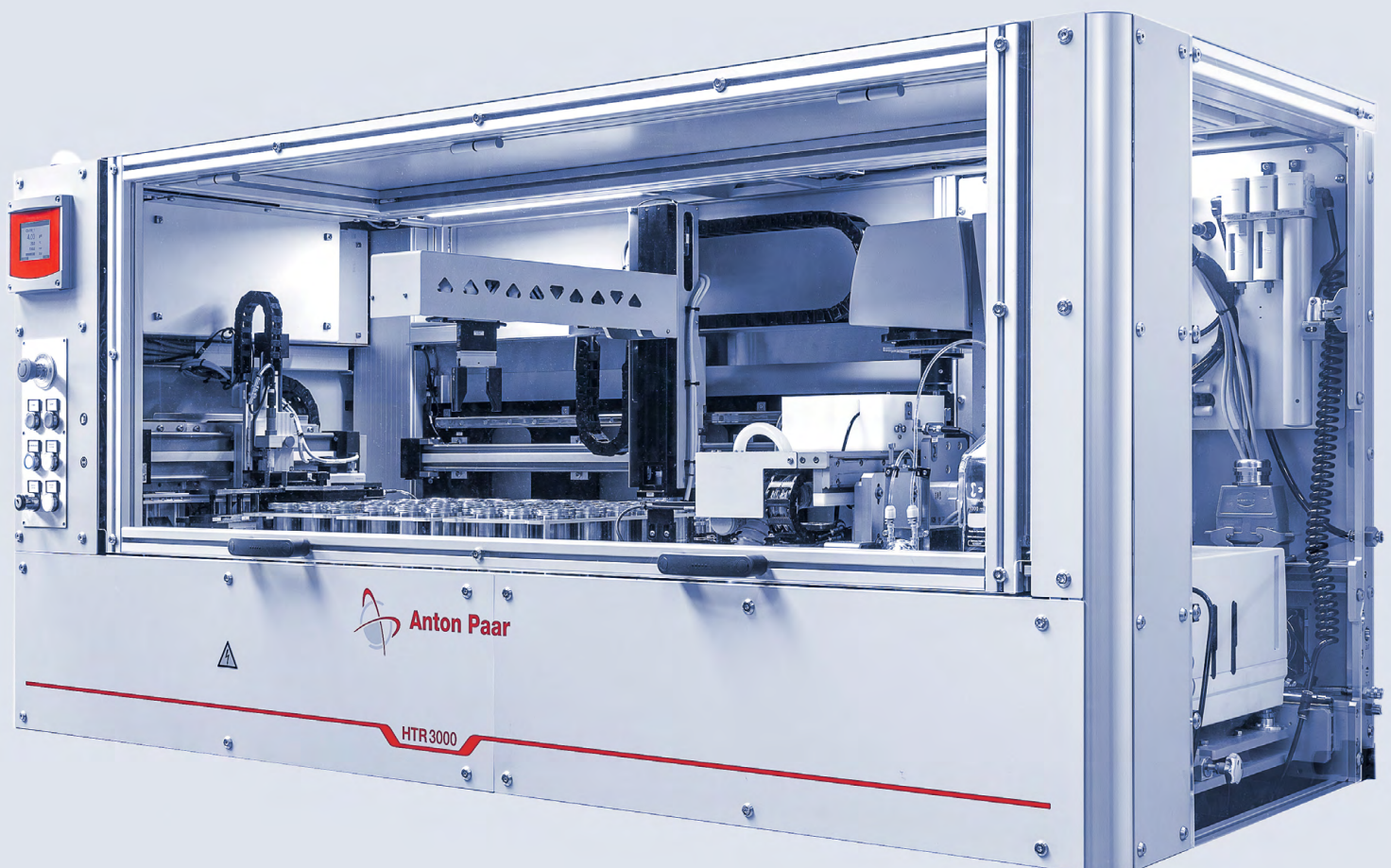


Fully Automated **Benchtop Rheometer**

HTR 3000





Accelerate Into the Future

Automation is the key for future innovation and productivity gains. Lab automation is essential, as it boosts productivity by accelerating routine tasks, allowing scientists to focus on complex work. It ensures repeatability and consistency in results, fostering innovation via high-throughput testing and rapid data analysis. With a shortage of skilled workers, automation helps maintain efficiency whilst also enhancing safety by reducing exposure to hazardous substances.

HTR 3000 is the solution to perform fully automated rheological measurements for concentric cylinders and other relative measurement geometries. It eliminates five manual steps, processing up to 250 samples a day, and wins you hours of walkaway time.

- Accelerate innovation: Automate your lab workflows
- Fully automated rheometer: 24/7 operation
- Increase walkaway time: Storage capacity of 54 samples
- Benchtop size saves lab space
- Eliminate five manual tasks: Also optimize repeatability and safety
- Global support and three-year warranty

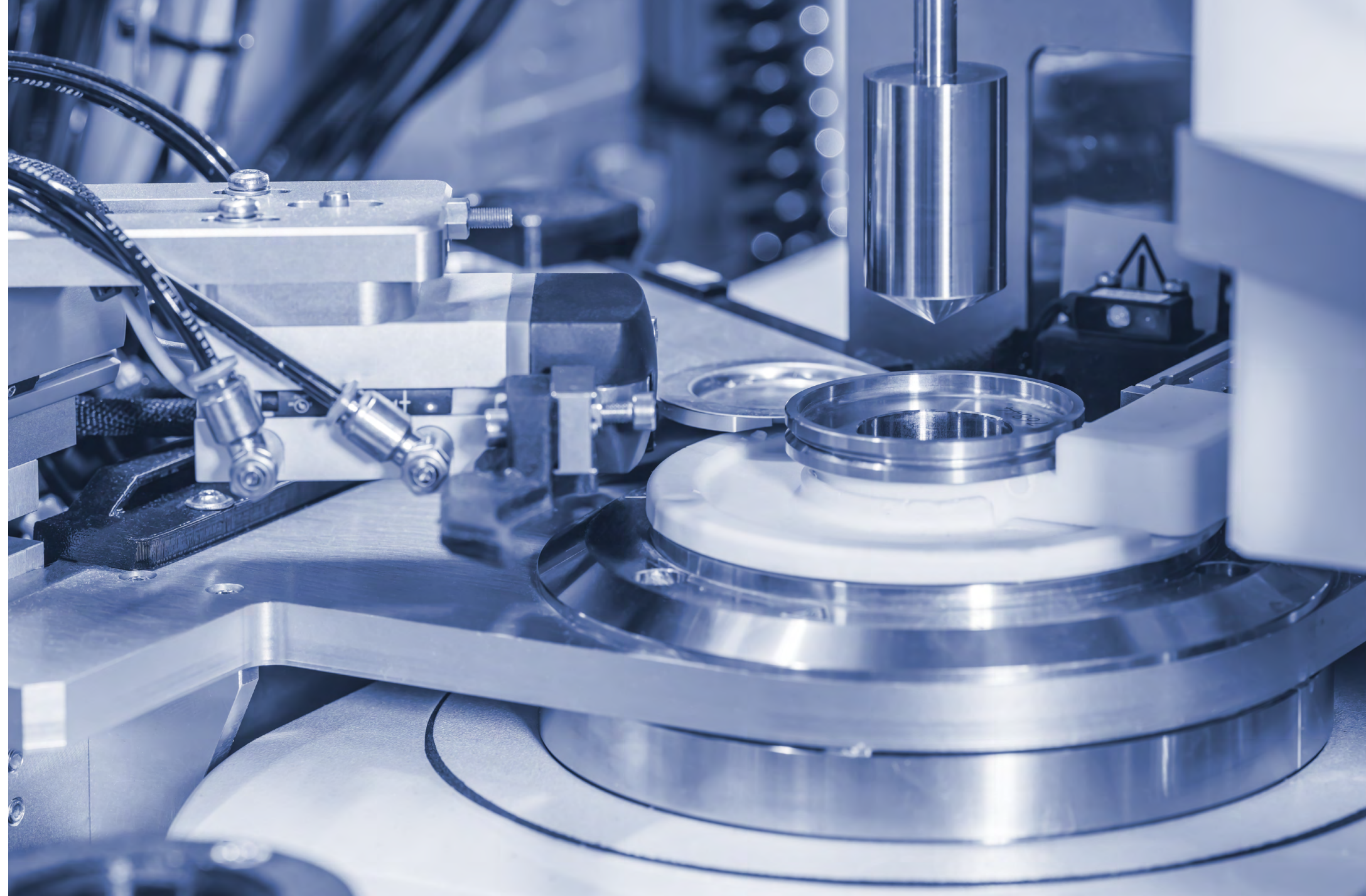
FIND OUT MORE



[www.anton-paar.com/
apb-htr-3000](http://www.anton-paar.com/apb-htr-3000)

Where Precision Meets Performance

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.



Automated rheometer: 24/7 operation

Optimize your processes with HTR 3000 for automated measurements with industry-leading rheometers like MCR 102e or MCR 302e. HTR 3000 is ideal for concentric cylinder and other relative measuring geometries. Leverage features like sample cup barcodes and temperature conditioning. The pH station also facilitates automated cleaning, eliminating human error and contamination.

Maximize your data quality

With HTR 3000, time-consuming job management is eliminated. Leave it to HTR 3000 to handle operations with the integrated control software. With the added benefit of automated data export, results are seamlessly integrated into your established systems. Fully traceable results boost data integrity, making HTR 3000 primed for high-precision labs of the future. It can also be used as a valuable resource for training AI models.

More sample storage, increased walkaway time

Walk away for hours at a time, safe in the knowledge that the fully automated rheometer is taking care of your measurement. With a storage capacity of up to 54 cups, users are free to focus on other tasks. The integrity and reliability of samples are ensured at every step of the process, even if they require temperature conditioning (e.g. food products). Optional features, such as the gravity caps, waste unit, tempered rack, and priority drawer make the HTR 3000 flexible for customer requirements.

Automated cleaning

Cleaning is one of the most time-consuming tasks in a laboratory. HTR 3000's integrated cleaning unit handles the cleaning of the measurement geometry – saving hours of cleaning time and costly resources.

Maximize safety

Automation minimizes human interaction with potentially harmful samples. In addition, HTR 3000 provides a range of safety features such as a door lock, monitored ventilation, and an explosion safety option; all integrated into a benchtop size system.

Additional pH measurement

Besides rheology, HTR 3000 can also be equipped with fully automatic pH measurement, allowing for more comprehensive analysis for formulation research and development.

Modularity: Maximum Flexibility

Standard configurations of HTR 3000 and a sophisticated range of feature upgrades produce individual configurations at a top price-performance ratio.

Automated measurements reduce your lab staff's workload, letting them focus on more pressing tasks. Use HTR 3000 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.

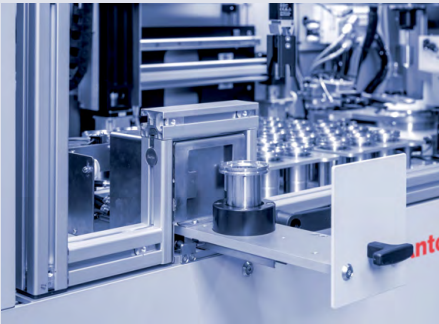


Features
High-precision rheometer MCR 102e (MCR 302e as option)
3-axis handling system with cup gripper
HTR 3000 control software
Cleaning unit for upper measurement geometry
Two sample racks (three as option)
36 cups with data matrix code (54 as option)
Connectivity (csv export or LIMS integration)

Optional features
⊕ Tempered rack (4 °C to 45 °C)
⊕ Priority drawer
⊕ Pre-tempering unit
⊕ pH station
⊕ Pharma data security package
⊕ Waste unit
⊕ Dosing station (instead of pH station)
⊕ Gravity caps
⊕ Code reader



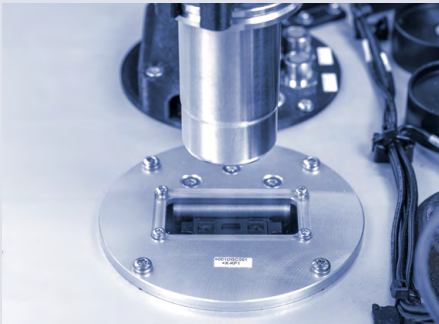
High-precision rheometer
and cleaning unit for upper
measurement geometry



⊕ Drawer for high-priority sample



⊕ Tempered rack (4 °C to 45 °C)



⊕ Code reader



3-axis handling system with cup
gripper / 54 CC27 cups



⊕ pH station

Configured for Your Workflow

A modular design allows HTR 3000 to meet requirements of almost any industry. Customized adaptations are available upon request, ensuring configurations are tailored to your workflow and challenges.

1 Industry: Painting and coating

Typical challenges: Hundreds of samples of varnish need to be measured every day to ensure the quality of the applied paint job. Failures are costly, documentation is a necessity.

Typical configuration: MCR 102e with temperature control unit, brushes, drying with pressurized air

- 20,000 samples measured per year (5-6 minutes per sample)
- Full automation frees up one employee and provides walkaway time for >8 hours
- Significant time and cost savings, in particular for cleaning efforts

2 Industry: Personal and household care

Typical challenges: Traceability, dynamic testing needs (short-term measurement requirements)

Typical configuration: MCR 302e, pre-tempering unit, code reader, pH station, pharma data security package, drawer for high-priority sample

- High throughput with optional sample prioritization
- Complete process and (secure) data integration into customer's data network

3 Industry: Food and dairy products

Typical challenges: Formula development of perishable samples

Typical configuration: MCR 302e, advanced cleaning unit, code reader, pH station, tempered rack

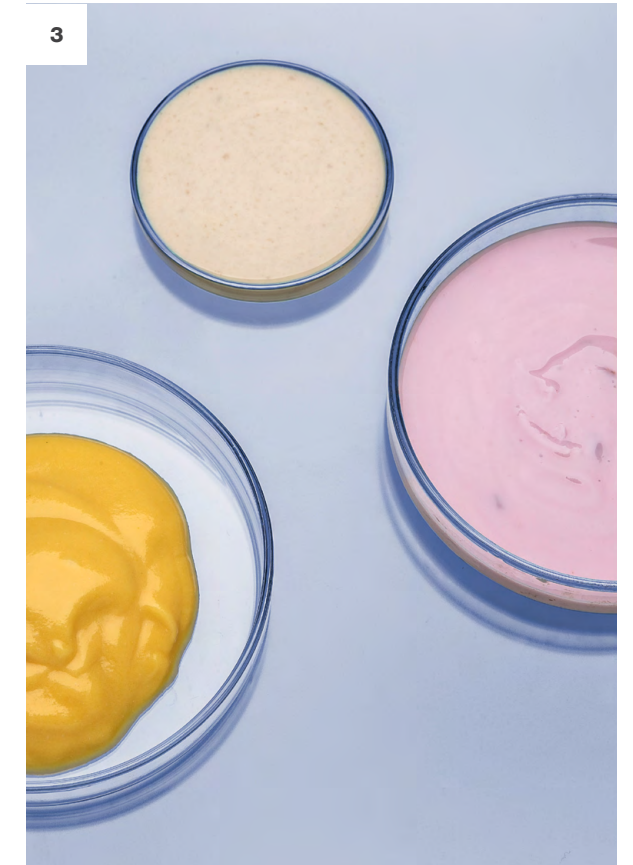
- Protection of perishable samples thanks to storage in a tempered rack
- Advanced cleaning unit for better cleaning results of hard-to-clean samples
- Connection to a LIMS-systems – full traceability of results

4 Industry: Chemicals and agrochemicals

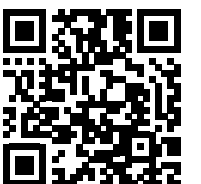
Typical challenges: Measurement of hazardous substances with minimum human interaction

Typical configuration: MCR 302e, monitored ventilation, customized bench, waste unit, advanced cleaning unit, code reader, pH station

- Monitored ventilation protecting operators
- Waste management with integrated collection of samples
- Full traceability thanks to sample tracking



CONTACT US
TO DISCUSS YOUR
APPLICATION



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

HTR 3000	
↓	
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. 2,000 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	100 V to 240 V, 16A, 50/60 Hz
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.

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

FIND OUT MORE



www.anton-paar.com/service



Maximum uptime

Regardless of how intensively you use your instrument, we help you keep your device in perfect shape and safeguard your investment. For at least 10 years after the discontinuation of a device, we'll provide you with any service and spare part that you might need.



Warranty program

We're confident in the high quality of our instruments. That's why we provide a full 3-year warranty. Just make sure to follow the relevant maintenance schedule. You can also extend your instrument's warranty beyond its expiration date.



Short response times

We know that sometimes it's urgent. That's why we provide a response to your inquiry within 24 hours. We give you straightforward help from great people, not from bots.



A global service network

Our large service network for customers spans 86 locations with more than 600 certified service technicians. Wherever you're located, there's always an Anton Paar service technician nearby.

