



# High Throughput Rheometer HTR

The first fully automated, robotically operated High Throughput Rheometer based on MCR 30x or higher

## **Robotic Rheometry**

The High Throughput Rheometer HTR from Anton Paar is an innovation landmark: the modern principles of high-throughput screening brought to full function on the ever-efficient MCR rheometer package.

The basic MCR setup remains as modular and customizable as ever - with the difference that HTR now performs all measuring steps automatically, operated by a robot. In its standard setup, it processes 96 samples in a single run - working for up to 24 hours a day. Laboratory staff is virtually given back the entire working day.

Measurements are performed with concentric cylinder as well as with cone-and-plate and parallel-plate geometries - an absolute novelty in automated rheometry. In addition, a pH meter can be integrated for automatic measurements of ph values.

Anton Paar's High Throughput Rheometer sounds like the future - because it is. And it is here to stay: Designed to withstand the demands of continuous operation, it will still be in perfect condition long after your investment has paid off.

### **Specifications**

Samples	up to 15.000 mPas (cleanable with water and detergent)	
Throughput	Depending on the measurement parameters, the simultaneous use of 2 measuring systems allows to continue measuring with one system while the other is being cleaned.	
Measuring instruments	MCR 30x or higher	
Measuring systems	CP, PP (max. diameter 50 mm)	
Temperature devices	Peltier controlled system (circulator for counter cooling included)	
Temperature range	-30 °C to 200 °C	
Test types	see MCR brochure	
Cleaning unit	<ul> <li>Cleaning of upper and lower measuring surfaces</li> <li>Pre-washing with pressurized hot or cold water</li> <li>Cleaning with water, detergent and brushes</li> <li>Rinsing with pressurized hot or cold water</li> <li>Drying with hot air</li> <li>Cleaning parameters can be adapted to the specific needs of the individual application.</li> </ul>	

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Dispensing system	automated pipetting system with disposable tips Volume up to 1 mL		
Sample magazine	96 samples max. 10 mL, all vials are covered		
Barcode	2D Datamatrix on the bottom of the sample vials		
Interface to database	ASCII files		
Dimensions	1350 x 1050 x 1950 mm (w/d/h)		
Weight	900 kg		
Power	Connector: Voltage: Power:	CEE 16 A 5 pole 400 V/50 Hz 7500 W	
Air pressure	Connector: Quality: Pressure: Flow rate:	Inner hose diameter 8 mm DIN ISO 8571-1 Class 3 (oil content < 1 mg/m <sup>3</sup> ) 5-10 bar max. 95 NL/min	
Water line	Connector:	Hot water, cold water:	
	Pressure: Flow rate:	diameter 8 mm 3-8 bar	
Sink drain line		diameter 8 mm 3-8 bar max. 2 L/min	
Sink drain line pH measurement	Flow rate: Connector:	diameter 8 mm 3-8 bar max. 2 L/min Inner hose/tube diameter 28 mm ration of a Metrohm	

#### Anton Paar<sup>®</sup> GmbH

Sample preparation

Microwave synthesis

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#### Instruments for: Density and concentration measurement Rheometry Viscometry

Colloid science X-ray structure analysis Refractometry Polarimetry Volatility

Oxidation Stability Cold Flow Properties Consistency & Ductility Various Petroleum Properties High-precision temperature

measurement

Specifications subject to change without notice.

#### Your distributor:

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