

# HAAKE Viscotester 1 plus & 2 plus for quick and reliable viscosity measurements

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Carrying case

## Application

These small, robust and battery-operated rotational viscometers are suitable for quick and reliable tests and comparative viscosity measurements in laboratory and production areas. Rheological measurements can be performed in a wide range of applications such as food and beverages, paints and coatings, oils and greases or cosmetic and personal care products.

The hand-held HAAKE Viscotester 1 plus & 2 plus can also be operated on a stand. These ergonomically designed viscometers are operated via an intuitive one-button operation. Pushing the button the Viscotester can be switched on and off, the menu navigation is intuitive. Reliable results are guaranteed thanks to the auto analysis function of the instrument, clear error messages if applicable and an indication of the next recommended calibration.

The measuring principle is based on a rotor immersed in a fluid which rotates at a constant speed of 62.5 rpm. The fluid's resistance to the rotation is measured and then converted to the viscosity of the fluid. The resulting viscosity value is shown on a digital



HAAKE Viscotester 2 plus

display. The difference between both versions is the viscosity range that can be measured. The VT1plus is suitable for measurements on low to medium-viscous samples such as inks, oils and dressings, whereas the VT2plus enable measurements on medium up to high viscous samples, e.g. creams, pastes and thickeners.

Both viscometers were delivered as ready to go packages in a stable carrying case consisting of the base unit with 3 rotors, a holder for a support stand and a multilingual manual in German, English and French.

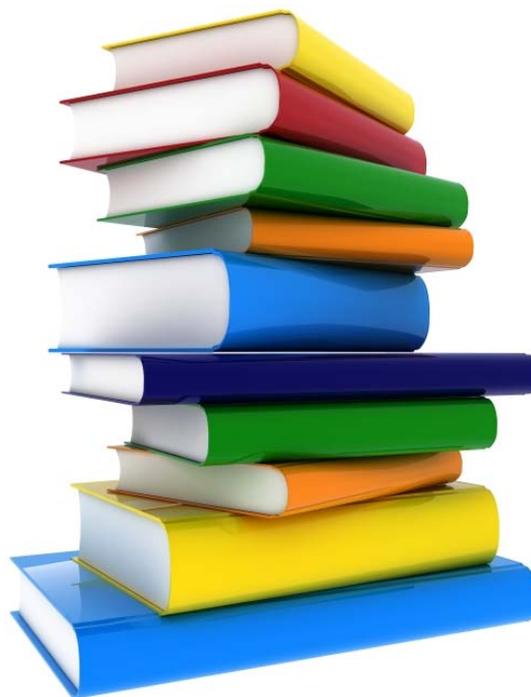
## Advantages at a glance

- Ready to go package: no additional accessories required
- Quick viscosity test
- Location-independent measurements thanks to battery-power
- Intuitive operation: training not necessary
- Reliable results due to a digital display, error messages and service recommendations

## Options and customized versions for individual tasks

The HAAKE Viscotester can be modified in order to fulfil the needs and requirements of individual applications. The measuring inaccuracy of the HAAKE Viscotester 2 plus can be improved up to  $\pm 1$  % FSD (full scale deflection) instead of  $\pm 5$  % FSD by implementing the high accuracy option. The unit of viscosity is mPas for the VT1plus and dPas for the VT2plus by default. The Viscotester can be modified in terms of the design of the measuring geometries and firmware such as the viscosity units or the information shown on the display.

The company Dural GmbH (www.durapro.de) globally produces and sells different kinds of adhesives. One of these products is a reactive polyurethane (PUR) hot melt adhesive used for bookbinding, which cross-links via air moisture. Based on the HAAKE Viscotester 2 plus, a custom tailored version with modified measuring geometry and firmware has been designed for online viscosity measurements of this product. Should the viscosity surpass a certain threshold the adhesive running in the production line has to be replaced by a new batch. Based on this viscosity check a high quality of adhesion is guaranteed.



**Order information**

399-0100	HAAKE Viscotester 1 plus (1.5 - 330 mPas): Base unit with batteries, instrument holder, 2 measuring cups (A and B), 3 rotors (no. 3, 4 and 5), delivered in a carrying case.
399-0200	HAAKE Viscotester 2 plus (0.3 - 4000 dPas): Base unit with batteries, instrument holder, 1 measuring cup (3), 3 rotors (no. 1, 2 and 3), delivered in a carrying case.
222-1693	Option $\pm 1$ % measuring uncertainty for HAAKE Viscotester 2 plus (standard: $\pm 5$ %)
on request	Hard- and firmware modifications for HAAKE Viscotesters 1 plus & 2 plus

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