

Software LS 300

The Low Shear viscometer LS 300 is fully controlled by software LS 300.

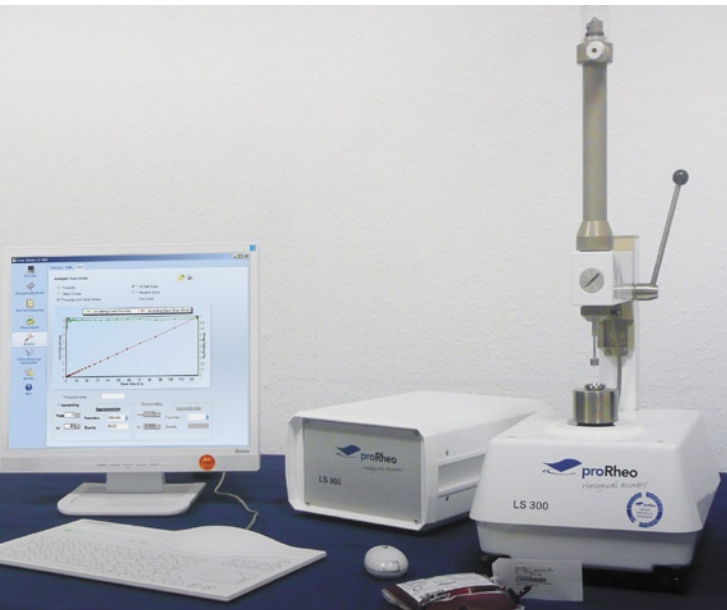
The measuring principles are:

- Single Point measurement
- Steps
- Flow curve
- Relaxation

After a first definition of a measurement procedure, it can be easily repeated. This assures repeatability and comparability of measuring results.

Measuring data is stored and available as table or diagram. Evaluation according the standard rheological models is easily done.

Excel or ASCII- files can be chosen as output formats to allow further evaluation within other programs.



Technical information

Measuring ranges:

depending on measuring system used

Viscosity $1,5 \times 10^{-3} - 6,0 \times 10^6$ mPas

Shear stress $2,0 \times 10^{-5} - 6,0 \times 10^{-1}$ mPa

Shear rate $3,5 \times 10^{-3} - 2,5 \times 10^2$ s⁻¹

Filling-in volume:

depending on measuring system used

Volume 0,07 – 2,4 cm³

Accuracies:

Torque < 1,5 %

Rotational speed < 0,5 %

Temperature:

Rheometer system 10°C – 50 °C

Test substance max. 80°C

Power supply:

Voltage 110 – 240 V

Frequency 50/ 60 Hz

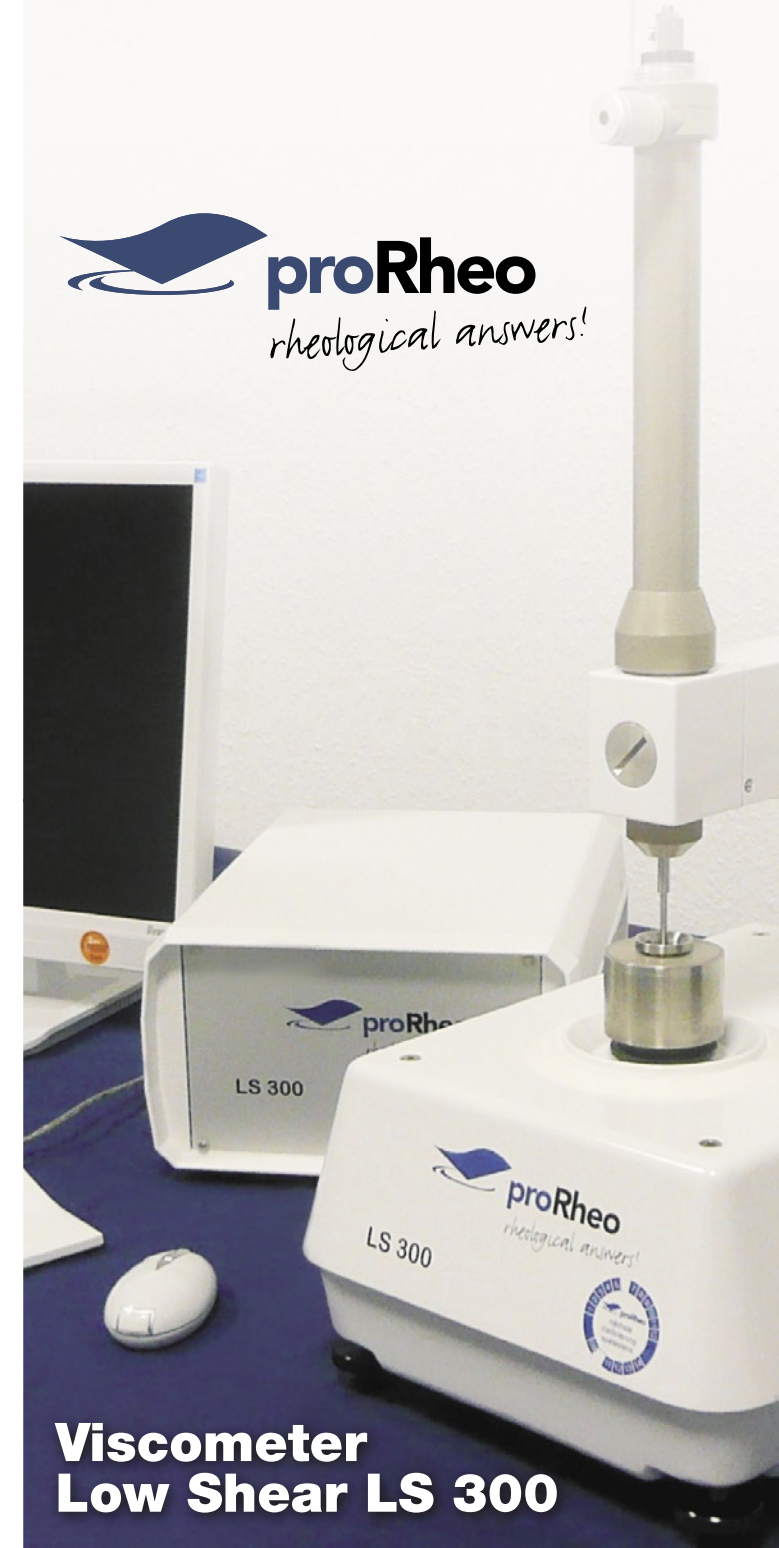
Power input max. 500 W

Contact:

proRheo GmbH
Bahnhofstr. 38
D- 75382 Althengstett

Phone: +49 7051-92489-0
office@proRheo.de

www.proRheo.de



**Viscometer
Low Shear LS 300**

Low Shear LS 300

Rheometer system for easy and exact determination of viscosity

Fields of application

Low Shear 300 renders most efficient services in research and development work related to the determination of rheological properties in the field of:

- Medicine
- Biology
- Chemistry and Pharmacy
- Polymers
- Food industry

On substances as

- Blood and blood plasma
- Eye secretions and sputum
- Synovial fluids
- Proteins
- Emulsions, suspensions and solutions
- Paints and varnishes
- Detergents

What does low shear mean?

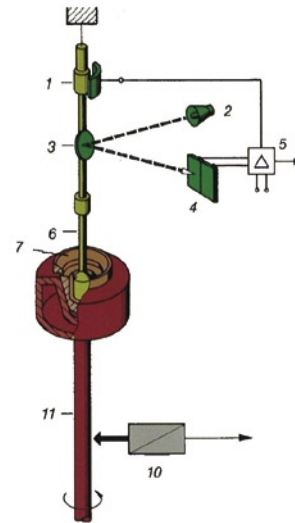
Low shear measurements allow research work to be done on substances:

- without destroying their internal structure, e.g. erythrocyte aggregation in blood
- without disaggregation of molecules in solutions of high polymers
- without expensive auxiliary installations for measurements of very low viscosity substances (e.g. gases)

Measuring principle

The thermostatically controlled measuring cup holder of the Low Shear 300 is driven according to the Couette principle. The speed is given and controlled by software LS 300.

The test substance's reaction moment causes – via the measuring bob – a minimum deflection of the frictionless suspended bob. A light beam reflected across a mirror is monitored by a photo-cell and amplifies for transmission to the compensation system's coil.



The current required for zero point is proportional to the reaction moment and, therefore, a function of the viscosity.

Measuring values are stored in the control PC and shown on the display.

Customer assistance program

System responsibility

- set up and start up of equipment
- Instruction and assisting personnel using our instrumentation

Rheological laboratory

- Demonstration of systems and instrumentation
- Solution of measuring problems
- Rheological research work

Training of operators

- Initiating operators to practice oriented procedures

Rheology training courses

Customers information

- Application reports
- Software updates
- New instruments
- Visco-News publication

Programs adapted to customers needs

- Complementary programs and modifications

Servicing

- At our customers' location

We pay great attention to efficient after-sales service.