# Rosand RH7/RH10

# Robust research capillary rheometers for high force conditions.

Used in hundreds of research laboratories around the world, the robust ‘H’ frame design of Rosand RH7 and RH10 floor standing capillary rheometers allows operation under ultra-high loading conditions, as well as providing optimized space for multiple accessory configurations.

# Features and benefits

Research-level Rosand RH7 and RH10 capillary rheometers provide highly flexible measurement capabilities for materials under high pressure and high shear rate extrusion - from polymer melts to ceramics, and from foodstuffs to inks and coatings.

* High force range (up to 100kN) and wide dynamic speed range (>225,000:1) allow test correlation with real material processing conditions.
* Twin bore barrels as standard enable absolute shear viscosity measurements and simultaneous calculation of extensional (elongational) viscosity.
* Range of optional barrel sizes and barrel materials to permit measurement of thermally-sensitive, chemically-aggressive or aqueous-based samples.
* Wide range of high precision tungsten carbide dies as standard to cover all materials and test types.
* Easily interchangeable melt pressure transducers to cover all test requirements – configured with low noise, triple-stage amplifiers for optimized measurement sensitivity at the die entry when using ‘zero length’ dies (extensional viscosity measurements).
* Nitrogen purge option available for testing in a dry, inert atmosphere to minimize sample degradation.
* Integral fume chamber with extraction to vent sample gases for operator safety.
* Proprietary bi-modal speed control algorithms suited to low and high speed operation optimize shear rate measurement range for a particular die.
* Precise sample temperature control using three independent zone heaters, with 10 times DIN accuracy platinum resistance thermometers. High temperature (500ºC maximum) and cooling coil options also available.
* Rigid ‘H’ frame design for compliance-free measurements in transient tests such as pVT determination.
* Open design below barrel exit to accommodate optional accessories such as die swell measurements, melt cutters, slot die system and melt strength (Haul Off).
* Easy to use Flowmaster software with full range of tests and analyses for shear and extensional viscosity, as well as determining sample stability, wall slip and melt fracture.