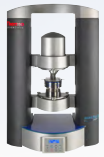
Rheometers & viscometers

Industry standards compliance

Which rheometer fulfills which industry standard? Entry-level rheometer for absolute viscosity measurements with integrated temperature control. Advanced rheometers for extended material characterization over the largest measuring range.

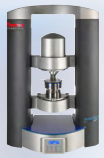
The following table provides an overview of the compliance of various Thermo Scientific™ HAAKE™ Rheometers with selected industry standards.





Standard	Industry / sample type	HAAKE Viscotester iQ	HAAKE Viscotester iQ Air	HAAKE MARS iQ	HAAKE MARS iQ Air	HAAKE MARS 40 / 60	Required accessory / measuring geometry
ASTM® D2556	Adhesives (apparent viscosity)	●	●	●	●	●	Viscometers spindles for relative viscosity, universal container holder
ASTM D4092 (similar to ISO® 6721-1)	Polymers (Standard terminology for dynamic mechanical properties of plastics)	✖	✖	●	●	●	Parallel plates or solids clamping tool, parallel plates, upper and lower electrical temperature modules, or temperature chamber
ASTM D4440 (equivalent to ISO 6721-10)	Polymers (oscillatory measurements)	✖	✖	●	●	●	Parallel plates, upper and lower electrical temperature modules or temperature chamber
ASTM D4473	Polymers (oscillatory measurements, curing of thermosetting resins)	✖	✖	✖	●	●	Parallel plates, TM-PE-P, PEEK cover, TM-IN-H or TM-EL-H depending on temperature range. Cone and plate only in the case of isothermal tests. Solids clamping tool for composites

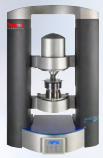




Standard	Industry / sample type	HAAKE Viscotester iQ	HAAKE Viscotester iQ Air	HAAKE MARS iQ	HAAKE MARS iQ Air	HAAKE MARS 40 / 60	Required accessory / measuring geometry
ASTM D5279 (equivalent to ISO 6721-7)	Polymers (torsional DMA)	✖	✖	✖	●	●	Solids clamping tool, temperature chamber
ASTM D7271	Paints & Coatings (oscillatory rheology)	✖	✖	✖	●	●	Cone C20 2°, TM-PE-P, PEEK hood
DIN® 1342 1-3	General rheometry	●	●	●	●	●	Absolute measuring geometries, temperature control
DIN 51810-1	Lubricating greases	✖	✖	✖	●	●	Cone C25 1°, TM-PE-P, PEEK cover
DIN 51810-2	Lubricating greases	✖	✖	✖	●	●	Plate P25, TM-PE-P, PEEK cover (tests at +25 °C), TM-IN-H and AC200 thermostat for tests at -40 °C
DIN 51810-4	Lubricating greases	✖	✖	✖	●	●	Cone C25 1°, TM-PE-P, PEEK cover
DIN 53019-1	General rheometry (coaxial cylinder measuring geometry)	●	●	●	●	●	Coaxial cylinder (with cone at bottom of rotor)
DIN 53019-2	General rheometry (calibration and uncertainty)	●	●	●	●	●	Coaxial cylinder (with cone at bottom of rotor) or cone and plate
DIN 53019-3	General rheometry	●	●	●	●	●	Absolute measuring geometries
DIN 53019-4	General rheometry (oscillatory rheology)	(●)	●	●	●	●	Absolute measuring geometries
DIN EN 17408 (replaced DIN 54458)	Adhesives	✖	✖	✖	●	●	Plate P25, TM-PE-P, PEEK cover
DIN EN ISO 3219 1-2	General rheometry	(●)	●	●	●	●	Absolute measuring geometries, temperature control
DIN EN ISO 6721-1	Polymers (oscillatory measurements)	✖	✖	●	●	●	Parallel plates or solids clamping tool, upper and lower electrical temperature modules or temperature chamber
ISO 2884 -1	Paints and varnishes	●	●	●	●	●	Cone & Plate measuring geometry
ISO 2884-2	Paints and varnishes	●	●	●	●	●	Relative measuring geometries (disc, balls), in combination with 250 ml tin can

(●) Oscillatory measurements are an optional feature





Standard	Industry / sample type	HAAKE Viscotester iQ	HAAKE Viscotester iQ Air	HAAKE MARS iQ	HAAKE MARS iQ Air	HAAKE MARS 40 / 60	Required accessory / measuring geometry
ISO 6721-7	Polymers (torsional DMA)	✖	✖	✖	●	●	Solids clamping tool, temperature chamber
ISO 6721-10	Polymers (DMA)	✖	✖	●	●	●	Parallel plates, upper and lower electrical temperature modules or temperature chamber
ICA / IOCCC	Chocolate	●	●	●	●	●	Coaxial cylindar CC25 DIN, TM-PE-C, PEEK cover
European Pharmacopoeia (Ph. Eur.) 2.2.8 & 2.2.10	Pharma	●	●	●	●	●	Coaxial cylinder geometries
United States Pharmacopoeia (USP) 912	Pharma	●	●	●	●	●	Cone & plate and coaxial cylinder geometries

More information regarding other standards:

DIN 53015, ISO 12058 **product specification FL52253**: HAAKE Falling Ball Viscometer

Variation of bitumen and asphalt-specific standards (ASSHTO®, ASTM, DIN EN, FGSV AL)

Data sheet D033: Dynamic shear rheometer (DSR) for bitumen and asphalt tests—HAAKE MARS iQ Air Rheometer

We can help you select the right rheometer.
Please contact us at **thermofisher.com/rheometercontactus**