TECHNICAL SPECIFICATION

International standards	ISO 13145 , ISO 6502, ASTM D 5289, ASTM D 6204, ASTM D 6601, ASTM D 6048, ASTM D 7050, ASTM D 7605, DIN 53529
Die configuration	Biconical, closed die system, sealed
Drive system	Direct, wearless servo drive system with ceramic bearings
Oscillation frequency	0.001 Hz to 33 Hz (0.001 Hz to 50 Hz optional)
Oscillation strain	+/- 0.01° to 20° (+/- 0.01° to 90° optional)
Temperature range	Ambient to 232 °C
Measured Data	Torque, temperature, frequency, strain; Optional: Normal force
Calculated Data	S´, S˝, S*, G´, G˝, G*, tan δ, η´, η˝ and η*
Die gap	0.45 mm nominal
Sample volume	approx. 4.5 cm^3

Closing system	Soft closing to prevent foil rips and damage of test sample
Torque range	0.001 to 250 dNm
Temperature control system	Ambient to 232 °C, precision +/- 0.03 °C, Max. heating and cooling rate: 85°C/min, digital, microprocessor controlled (Pneumatic double channel cooling system optional)
Temperature check system	Recordings of the temperature gradient on the screen, microprocessor monitored
Subroutines	Isothermal, Non-Isothermal, Timed, Temperature Sweep, Strain Sweep, Frequency Sweep, Shear rate Sweep, Relaxation, Retardation, Hysteresis, Tension tests, LAOS, ...
Data Interface	Ethernet (10/100 MBit), USB (int.), CF card (int.), RS232 (opt.)
Data points	Over 3500 data points available for each static subtest; Including S‘ Min, S‘ Max, TS 1, TS 2, TC 10, TC 30, TC 50, TC 90; Integrated, automatic reporting features for dynamic tests
Pneumatics	min. 4.5 Bar / 60 psi