MI-ROBO

Melt Flow Indexer

To meet ISO 1133 and ASTM D1238



Determination of Melt Density according Method A

Fully automated MFI/MVR measurements with:

- → Barrel cleaning
- → Piston cleaning
- → Die cleaning
- → Optional Online Test Material sampling system
- → Inlet design

According to standards:

ISO 1133 ASTM D1238



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RG25 auto

Capillary Rheometer

Integrated Cleaning Modules in RG25 auto

- Barrel Cleaning
- Pre-cleaning of die

External Modules

- Piston Cleaning Tool
- Preperation of Cleaning Cloth (for barrel Cleaning)
- Sample preparation (per online-sampling)

According to standards:

ASTM D3835 (Viscosity) ISO 17744 (PVT) ASTM D5930 (TCM) ASTM D5099 (Rubber) ISO 11443 (Viscosity)



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RG ADD-ON: NORMALSTRESS

RUBBER PROCESS ANALYZER

RG25 AUTO

THERMOSET CAPILLARY RHEOMETER

IV TESTER

ELONGATION VISCOSITY

PVT500 HYBRID





IV-Tester

Melt Flow Indexer

Determination of intrinsic viscosity

- Hands-on IV measurement method for
- → Polyester (PET)
- → Polyamid (PA)
- → Polypropylen (PP)
- Storage of up to 500 parameter sets with 3000 measurements each, as a stand alone instrument
- High-resolution position transducer, resolution 0.025mm/Impulse
- Timer setup
- Easy to use
- Intelligent service monitoring

According to standards:

ASTM D1238 ISO 1133 ISO 12418-2:2012



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TCR

Thermoset Capillary Rheometer

- Rheological Characterisation of Thermosets
- Use of Spiral mold with 5 pressure transducer
- · Characterisation of
- → Injection temperature
- → Material flow behavior in mold
- → Crosslinking behavior



Rheo-Info (Whitepaper) goettfert.com/TCR



PVT500 – hybrid

Capillary Rheometer

- Pressure Volume Temperature measurement
- Isobaric or isothermal measurement
- Cooling rates of 30 K/min from 500°C up to room temperature
- Integrated tempering jacket for air cooling as well as liquid cooling
- Optimized test chamber, low heat supply necessary
- Addon: Thermal conductivity measurement (TCM)

According to standards:

ISO 17744 (PVT) ASTM D5930 (TCM) ISO 22007 (TCM)



Rheo-Info (Whitepaper)
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mi40 visco Melt Flow Indexer

Viscosity testing using plastometer

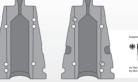
- MFR/MVR measurement
- Viscosity option by servo motor
- Viscosity calculation from punch force
- Extended shear rate range
- Optional: measurement of apparent flow curves according to ISO 11443
- Shear rate is limited upwards by maximum force of 800 N or correspondingly 110 bar
- Operation directly at the powerpanel or via PC with miCONNECT

According to standards:

ISO 11443 (viscosity) ISO 1133 ASTM D1238 ASTM D3364



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Normalstress

RG Add-on

- Determination of Normalstress at high shear rates and closer to the processing shear rates which was not possible with conventional technique
- Detection of flow instabilities at processing shear rates
- Measurement of Viscosity, elongation viscosity and normal stress differences



Online Determination

of Elongation Viscosity

- Twin Die Online Rheometer used for online determination of Elongation Viscosity
- Bagley Correction



RPA

Elastomer-Testing

Flexible Rubber Process Analyzer

- Determination of Transient Viscosity
- Deformation of 90° or optional 360° with shear rate up to 25 1/s
- Higher selectivity by using LAOS in combination with Fast Fouriertransformation (FFT)

According to standards:

ISO 6502 ASTM D5289 ASTM D6601 ASTM D6204 DIN 53529 ISO 13145 ASTM D7050 ASTM 6048 ASTM D7605



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