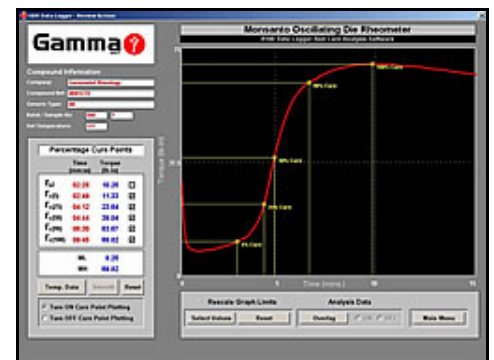


Gammadot Rheology is an independent testing laboratory that offers a range of testing services based on over two decades of providing rheology and materials characterisation support to the plastics and rubber industries. Projects range from short term comparative testing to long term quality control projects and our clients range from polymer manufacturers to end users. From applying rheology to quality control, failure analysis and process optimisation issues, to providing accurate materials properties data for flow simulation, Gammadot is able to offer our clients standard and custom solutions to all their flow and thermal properties requirements in a cost effective, confidential & timely manner.

Cure Measurement

Gammadot Rheology offers a selection of test methods for the determination of rubber cure ranging from simple isothermal measurements utilising a re-instrumented Monsanto R100 Oscillating Die Rheometer (ODR) to in-depth compound investigations using an Alpha Technologies Rubber Process Analyzer (RPA200). The RPA has the facility to vary both the strain & frequency applied to the rubber sample enabling the generation of comprehensive rheological information in both the pre- & post-cure state. The cure kinetics of liquid elastomers & thermosetting plastics are characterised using a rotational rheometer fitted with a disposable measurement system.



Shear Viscometry

The rheological behaviour of a material is the single most important property in the commercial processing of polymers. If a material cannot be deformed and made to flow, you can not process it. Many materials have similar flow behaviour at low shear rate but due to structural issues such as molecular weight / molecular weight distribution, polymer / filler interaction, etc, have radically different flow characteristics at process relevant shear rates. Gammadot Rheology use an ACR2100 advanced capillary extrusion rheometer to characterise material over three decades of shear rate giving an insight into a material's processing performance.



Flow Analysis Support

Cure & rheological behaviour are also used in conjunction with a range of other test parameters such as specific heat capacity, PvT behaviour & thermal conductivity to provide the data files required to perform accurate process & injection mould optimisation using software packages such as Moldflow, Moldex 3D & Sigmasoft 3D.



For More Detailed Information - www.gammadot.com

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