

**The Practice** of optimising production of plastic products using computer-based flow analysis software has become increasingly sophisticated since its introduction. In order to produce accurate predictions it is essential to use the appropriate material properties data. Different materials, even of the same generic type, can behave in substantially different ways during processing. Modern software packages have material database systems that contain the necessary characteristics on many hundreds of thermoplastics, elastomers & thermosets, although they cannot cover every material a user is liable to consider. For this reason Gammadot offers a material characterisation service.








**Gammadot Rheology** offers a portfolio of testing services aimed at providing accurate materials data for a wide variety of finite element flow simulation software packages including **Autodesk Moldflow**, **Moldex3D** and **Sigmasoft 3D**.

## Material Characterisation Packages can Include:

### Thermoplastic Testing

-  **Shear Viscosity**
-  **Specific Heat Capacity**
-  **Thermal Conductivity**
-  **Solid Density**
-  **PvT Behaviour**
-  **Mechanical Properties**
-  **Melt Flow Rate**

### Rubber / Thermoset Testing

-  **Reactive Viscosity**
-  **Cure Kinetics**
-  **Thermal Conductivity**
-  **Uncured / Cured Solid Density**
-  **Uncured / Cured PvT Behaviour**
-  **Specific Heat Capacity**
-  **Mechanical Properties**

