

Polymer Potting Equipment of Fraunhofer IFAM

- Material characterization by DSC, TGA-MS, IR, rotational rheometer, TMA, DMA, laser flash method (thermal conductivity), thermal conduction
- Mechanical testing (quasi-static, dynamic, high dynamic, fatigue)
- Various special methods, e.g. determination of reaction shrinkage, water absorption
- Vacuum potting chamber
- 1 K and 2 K dosing system test facility
- Microdosing and micropositioning systems
- Various dispersion and synthesis techniques
- Surface analysis by XPS, AES, TOF-SIMS, electron microscopy
- Atmospheric pressure and low-pressure plasma processes, pyrosil processes, CO₂ snow blasting, laser
- Climatic chamber
- Ring line facility for determining the shear stability of individual components
- X-ray computer tomography for detection of inclusions, blowholes etc.
- Dielectric analysis (DEA)
- Flow simulation by means of Computational Fluid Dynamics CFD
- Design and analysis of load cases and residual stress states by means of FEM, determination of (thermo-) mechanical parameters
- Shrinkage measurements (curing shrinkage)