



# Compounding Service

## MIXING AND PROCESSING OF THERMOPLASTIC AND COMPOSITE MATERIALS

### KEY WORDS

MIXING,  
THERMOPLASTICS,  
PROCESSING

### DESCRIPTION

The service offers the mixing, dispersion, and homogenization of thermoplastic polymers, recycled materials, and functional compounds using two complementary systems: a plastograph for rheological evaluation and a microcompounder for the continuous processing of small batches. Both systems allow for processing from 50 g to several kg (batches) at laboratory and pilot scales, with temperature, speed, and torque control, and rheological monitoring software that records melt viscosity, torque, and shear stress. The service includes material preparation, parameter adjustment, and delivery of results in digital format, along with labeled samples.

### AVAILABLE TECHNIQUES AND/OR EQUIPMENT

- Laboratory and pilot-scale plastographs
- Microcomponent for continuous processing of small quantities
- Temperature, speed and torque control
- Rheological monitoring software (torque, viscosity, shear stress)

### APPLICATIONS

- Production of homogeneous and stable compounds for further processing
- Rheological evaluation during mixing or extrusion
- Validation of processability and dispersion of additives
- Reproducible quality control of polymer formulations

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