



Injection Molding Technical Service

PROCESSING OF POLYMERIC MATERIALS AT LABORATORY AND PILOT SCALE

KEY WORDS

INJECTION MOLDING,
THERMOPLASTICS,
PROCESSING

DESCRIPTION

The service enables the laboratory and pilot-scale processing of thermoplastic polymers, blends, and compounds under controlled temperature, pressure, and injection speed conditions. Injection molding machines equipped with digital control of processing parameters are available, suitable for molding standardized test specimens. The service includes material preparation, optimization of injection conditions, digital recording of processing parameters, and delivery of labeled samples. This service allows for the validation of the processability, thermal stability, and functional performance of conventional, recycled, or modified formulations.

AVAILABLE TECHNIQUES AND/OR EQUIPMENT

- Laboratory injector
- Pilot-scale injection molding machine
- Temperature, time and injection pressure control
- Interchangeable molds for standardized test specimens

APPLICATIONS

- Production of reproducible test specimens
- Validation of processability and thermal stability of formulations
- Optimization of injection parameters and quality control
- Pilot tests for industrial validation or advanced characterization

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