



Thermocompression of Thermoplastic Polymers

OBTAINING SHEETS AND FILMS BY HOT PRESSING

KEY WORDS

THERMOCOMPRESSSION,
THERMOPLASTICS,
CIRCULAR ECONOMY

DESCRIPTION

The University of Aveiro provides advanced thermocompression capabilities for the processing, validation, and optimization of thermoplastic, recycled, or functional composite materials, supporting technology transfer and sustainable solution development. Processing is performed using pressing equipment with precise control of temperature, pressure, and cycle time, enabling the production of homogeneous, reproducible sheets, films, or specimens for thermal, mechanical, or barrier characterization. These capabilities allow processing at laboratory scale, facilitating the study of processability, thermal stability, and reproducibility, and optimization of polymeric or composite formulations under controlled pressing conditions. The outcomes include uniform samples ready for characterization or industrial validation, with digital delivery of process parameters and full traceability.

APPLICATIONS

- Molding of thermoplastic sheets, films or specimens.
- Processability and thermal stability assessment.
- Optimization of formulations and pressing conditions.
- Development of reproducible and functional materials.

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