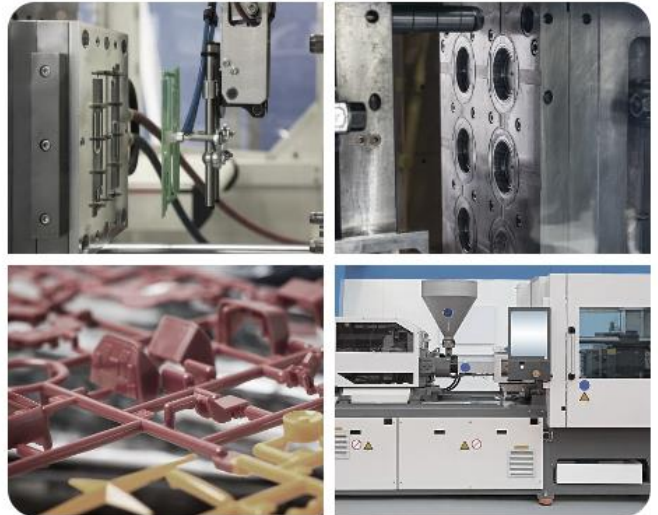


INJECTION MOLDING

Turn-Key projects – From formulation to prototyping and modeling

CHARACTERISTICS

- CHEMICAL OR PHYSICAL BLOWLING AGENTS (CO_2 , N_2)
- LOW PRESSURE PROCESS OR HIGH-PRESSURE PROCESS – CORE BACK TECHNOLOGY
- TAILORED FORMULATIONS BASED ON DIFFERENT THERMOPLASTICS: POLYOLEFINS (PP, PE, HDPE), POLYESTERS (PET, PLA), POLYAMIDE, THERMOPLASTIC ELASTOMERS, ETC.
- DIFFERENT TYPES OF FILLERS: TALC, FIBERS, NANOPARTICLES
- POSSIBILITY OF USING COMPLEX BLENDS BY COMBINING WITH COMPOUNDING LINE
- DIFFERENT MOLD GEOMETRIES

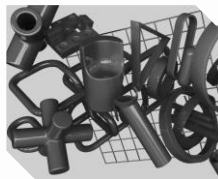


APPLICATIONS



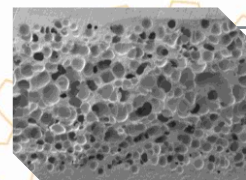
FORMULATION DESIGN

- Selection of raw materials: polymers and additives.
- Design of specific formulations to fulfill requirements in foamed parts.
- Analysis of foamability of the formulations.



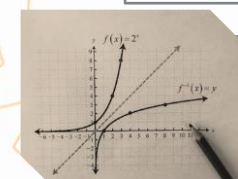
PRODUCTION OF PROTOTYPES

- Production of solid and foamed plaques/prototypes with different dimensions.
- Adjustment of blowing agent type and concentration.
- Optimization of processing parameters.



ANALYSIS OF STRUCTURE PROPERTIES RELATIONSHIP

- Quantitative analysis of solid and gas phase descriptors.
- Evaluation of mechanical (tensile, impact, tear), acoustic or thermal properties as a function of density.
- Establishing the structure-properties relationship.



BUILDING UP OF ANALYTICAL MODELS

- Building up analytical models for thermal, acoustic, or mechanical properties using the experimental data.
- Using the obtained equations as input for FEM analysis.

CONTACT US FOR MORE INFORMATION

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