Polymeron



Our research team has proven experience in the leading and co-working in industrial R&D projects in the field of polymer technology. We have strong expertise in the development of polymeric foam products, including morphological and mechanical characterization, material selection and shock-absorption optimization. Develop your foams with us!

DESIGN OF PACKAGING MATERIALS:

Cushion curve generation

Determination of cushioning curves by drop-weight testing Estimation of cushion curves for other foam thicknesses

Cushioning design support and product optimization
Material selection for cost reduction
Optimal contact area determination

SHOCK-ABSORPTION CHARACTERIZATION:

Impact testing

Custom-developed impactor geometries Impact velocity range: 0-20 m/s

- Deformation analysis with high-speed camera Maximum frame rate: 230.000 fps Max. resolution: 640x480
- Layer optimization in multilayer structures
- Cyclic compression tests

MORPHOLOGICAL ANALYSIS:

- Cell-structural characterization and failure analysis by scanning electron microscopy
- Computer tomography
- DSC, DMA and TGA measurements
- ✓AFM





