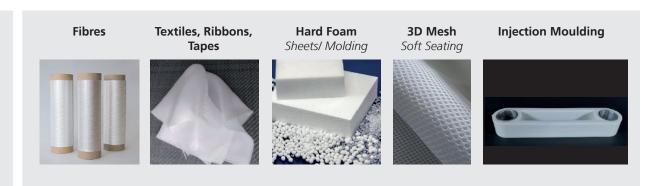


Manufacturing Techniques for Product Design | Fraunhofer CCPE Monomaterial Design Set

The Basics PLA or PET or PA



Sandwich Plates

Increasing Impact Energy Absorbation and Lightweight Design

Advanced Manufacturing Sheets, Plates & Simple 3D-Forms





Thermoplastic

180 cm x 100 cm 0.5 cm - 3 mm



180 cm x 100 cm 5 - 30 cm



180 cm x 100 cm 5 - 30 cm

Increasing Tensile Strength





Embedded inside Injection Moulded Part

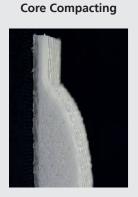


Increasing Complexity & Designing Large-Volume Components

Advanced Manufacturing Complex 3D-Forms & Components











Costs for Thermoforming or Injection Moulding Tools: 20 $k \in up$ to > 100 $k \in up$