

Short abstract

Fibre reinforced plastics (FRP) have been a standard in lightweight construction for a while now. One alternative trend in manufacturing, however, has turned to natural materials, which can be produced with lower energy costs. The thermoset specialists at Lorenz Kunststofftechnik have developed a Bulk Moulding Compound (BMC) and Sheet Moulding Compound (SMC) with flax, cut Jeans, reed,...that exhibits, depending on the composition, similar properties to traditional FRP. The fibres length can be selected according to the requirements of the intended use and the material can accordingly be produced through compression or injection moulding. In addition, the different natural materials open up new possibilities of use; the cut Jeans thermoset, for example, is easy to paint, laminate or finished and can thus also be used for design objects. An other important aspect during the development was the use of the Raw materials which are generated via local direct suppliers in a area of about maximum 500 km and looking into the aspects of the EU Circular Economy, Plastic Policy. This is an ongoing revolution by reducing the environmental footprint throughout the life cycle of the materials.

Lorenz Kunststofftechnik and NPSP has find ways to distribute those kinds of Products on the market, which will be presented during the Session.