



# ORGANOSANDWICH

## A new type of semi-finished product

Fiber-reinforced thermoplastic composites, cross-plys of 2 UD glass fiber/PP tapes in 0/90 or fabric can be laminated inline on our polypropylene honeycomb cores. This creates a new type of semi-finished product: the organosandwich. By integrating the laminating process of the organosheet on the honeycomb core within the production line, it is possible to produce organosandwich semi-finished products in a very cost-effective manner.

## Forming and functionalization by injection moulding

The processing of organosandwich semi-finished products is comparable to the processing of organosheets. However, a local ribbing of the component to increase the bending stiffness is not necessary. The stabilization is provided by the honeycomb structure. During the forming of organosandwich semi-finished products to components, small cycle times are possible due to the lower heat capacity. In complex shaped component regions the honeycomb core is molten down to a thin polypropylene layer, whereas the honeycomb core thickness and thus the large moment of inertia is maintained in the slightly curved main part of the sandwich component. As a result a very high stiffness is achieved with thin organosheet skins and thus with lower component weight and reduced costs.

