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Extrusion, Injection Moulding and Reaction Technologies for Natural Fibre Reinforced Composites

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The Krauss-Maffei Kunststofftechnik GmbH as part of the world leading MPM-Plastics-Machinery-Group has got a variety of fibre reinforced processing activities.

Injection Moulding

In the injection moulding division the biggest and most promising effort is the IMC-process which converts a 2-step compounding and injection moulding process into a 1-step inline compounding and integrated injection moulding process.

The main advantage of that development is a very flexible and cost effective process in terms of material formulations and a very gentle process in terms of material degradation.

Extrusion

In extrusion Krauss-Maffei offers a variety of different machine concepts to process polymer formulations in combination with natural fibres.

The markets for that type of fibre reinforced polymer processing worldwide develop in very different ways. The presentation indicates how the products and the processing are developed so far in the main world markets.

Reaction Technology

This area is more focused towards the replacement of artificial fibres by natural fibres. The Krauss-Maffei reaction technology division has developed some new processes which enables them to use natural fibres instead of for example glass fibres. The natural fibre injection (NFI-) process is already used for certain applications in the car industry and there are clear signs for further successful developments in the near future.