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NEW APPROACHES IN THE DESIGN OF PLASTIC PRODUCTS FOR EASY RECYCLING

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Abstract

The researches were initiated in the context emphasized by the competition having the idea of profit at its base, and sustainable development, which imposes limitations through different regulations and standards which would involve supplementary costs.

The research highlights the main trends in plastic product design in conditions of sustainable development of society. Plastics have an important role in the configuration of the new products just in the phase of conception. Having in mind the main advantages of the utilization of plastics, the expectation is to see an increase of the weighting of these ones in the products development. The paper underlies the fact that the new approaches of the life cycle of a product, and especially the conception phase are essential for the entire life cycle, taking into account the fact that the polluting agent is paying and the producer must take into account its extended responsibility, beyond the product sale.

This paper highlights the relevance of the retrieval of the product as a very important phase in sustainable development. It is stressed that, even since the conception phase of the product, there must be taken into account the recycling of each life phase of the product. This is applicable especially in the industry of automotive, which is under the pressure of the sustainability. In this context, the role of plastics will increase simultaneously with the solving of the recycling problems.

The advantages of using plastic materials (optimization the geometry of the product, the possibility to enclose into narrow spaces, the weight decrease, the fuel consumption diminish) are reflected gradually, together with the increase of the recycling rate.

Key words: design, development, plastics, product, sustainable

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