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Investigating the Effects of Injection Molding Parameters on the Mechanical Properties of Recycled Plastic Parts Using the Taguchi Method

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parameters obtained from the preliminary experiment were used to conduct the

principal experiment. By adopting L₉ Taguchi OA, the parts made from recycled plastic were produced by injection molding. ANOVA confirms that the most significant factor for flexural modulus of a recycled toolbox tray is injection time (\sim 40.49% percentage contribution). For stress at yield, the most significant factor is melt temperature with percentage contribution of about 43.34%.

Keywords:



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Simulation and experimental study in determining injection molding process

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