RESPONSE SURFACE OPTIMIZATION OF PLASTIC LATCH

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ABSTRACT

The aim of the presentation is to perform multi-objective optimization of plastic part. Model volume and specific latching process forces have been used as optimization objectives. Highly nonlinear behavior of frictional contact during latching process has been considered in FEM simulation. Response Surface Method has been used to reduce number of the design points evaluations. Evolutionary algorithm MOGA has been applied to solve multi-objective optimization task. Finite element model and optimization problem have been created and solved by ANSYS Workbench software.