

# The FEM Analysis of Open die Forging of Steel

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*An analysis of forging of steel blocks is described in the following paper. The forging was simulated using FE software DEFORM according to the proposed forging schedule. An optimization of stroke-related parameters like stroke depth and stroke offset is given as well. The necessary number of operations and required force are put into the relation. Finally the geometry of manipulation tools is proposed. Two tools sets were designed. The first set of tools are flat dies to be used for achieving bar with square cross-section around axis. The second set of tools consist of one flat die and one V-shaped die to be used for convenient forging of final bar with round cross-section.*

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