

SHAPING, DEBINDING AND SINTERING OF STEEL COMPONENTS VIA FUSED FILAMENT FABRICATION

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Abstract

An economical alternative for the production of steel parts via additive manufacturing is to combine Fused Filament Fabrication (FFF) with debinding and sintering in a process referred as Shaping, Debinding and Sintering (SDS). In this paper, the SDS process for two types of feedstock materials containing two types steel alloys is described: From feedstock compounding to sintering. It was found that using the same binder system is possible to obtain sintered parts shaped by FFF with these two types of steel alloys.