Measurement and modeling of textural anisotropy in Ti-6Al-4V

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Program Goal
• Predict crystallographic texture in Ti-6Al-4V forgings and experimentally validate models on forged articles

Approach
• Experimentally characterize forged billets at various stages of processing
• Extend existing finite element models to predict crystallographic texture development in simple forgings
• Extend model to more complex conditions and experimentally verify model

Benefits
• Address/mitigate issues of mechanical properties, anisotropy, and inspectability associated with texture in forged components

http://wildeanalysis.co.uk/fea/software/deform/deform-3d-suite/deform-cogging

Project Duration
Jan. 2015 to May 2017