

LIBRARY MODELS FOR HAMMERING MECHANISMS

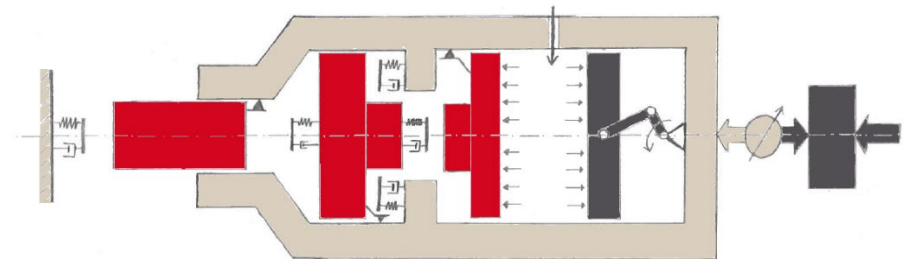
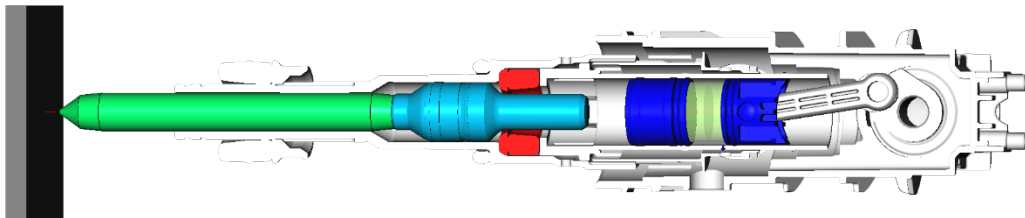


Problem Description

- Hammering mechanisms are core components of rotary&demolition hammers and impact wrenches
- The multibody dynamics are currently simulated in different libraries and software (Simulink, Simpack)
- The existing models should be migrated to a common Simulink model library

Objectives & Tasks

- Definition of suited assembly groups
- Implementation of required component models fitting to internal coding standards
- Assembly of component models to tool model
- Verify the models on component & tool level via test cases and via comparison with currently used models
- Used software tools: Matlab/Simulink, Git, Simpack



The hammering mechanism of a demolition hammer (left: CAD, right: sketch of a MBS model)