

## Dynamic simulation of watch mechanisms at IWC

Taking examples from the development of the chronograph movement C.69, we will outline our process of building and running modular multistage models with Ansys Mechanical and LS-Dyna. The steps involved are:

- Modular build-up from subsystems
- Multistage simulation containing:
- Prestressing and slow dynamics with LS-Dyna implicit
- Impact simulation with LS-Dyna explicit
- comparison to laboratory results

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