

## Study of the real structure of laser-cladded steel

The aim of this contribution is to describe the effects of laser additive manufacturing (cladding) on the real structure, microstructure, and mechanical properties of laser cladded H13 tool steel. Extensive experimental research combining X-ray, neutron and electron diffraction has been performed. Furthermore, the microstructure was described, the hardness and other mechanical properties were determined. Some results will be presented and discussed in the talk.

**Primary authors:** TROJAN, Karel (CTU FNSPE); Dr OCELÍK, Václav (University of Groningen, Faculty of Science and Engineering); ČAPEK, Jiří (CTU FNSPE); GANEV, Nikolaj (CTU FNSPE); ČECH, Jaroslav (CTU FNSPE)