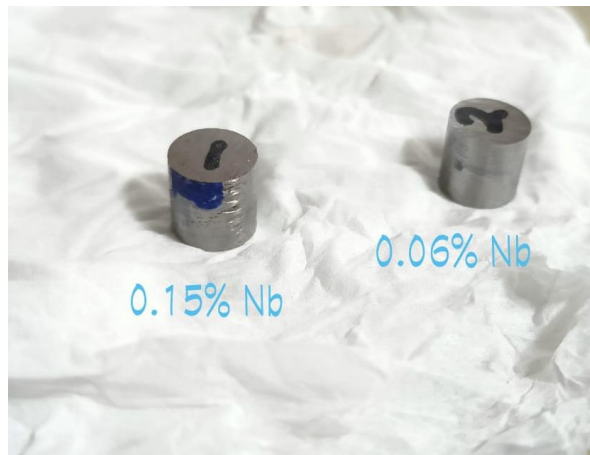




High-strength spring steel development for low-weight designs

Inventors: Koteswararao V. Rajulapati, SEST, UoH & Universität Siegen, Germany

The outcome of collaborative research between the School of Engineering Sciences and Technology (SEST), University of Hyderabad, India, and Universität Siegen, Germany is the development of a strong spring with low-temperature creep for low-weight design. SEST collaborated with the giant steel manufacturer, JSW steels as an industrial partner from Indian side and



University of Siegen (USI) and Muhr and Bender KG (MUBEA) were the academic and industrial partners from the German side respectively. This work was funded by Indo-German Science and Technology Centre (IGSTC) to Dr. Koteswararao V. Rajulapati, Associate Professor in SEST, UoH, Hyderabad. Conventionally used high-strength steel showed low-temperature creep deformation due to dislocation glide in the retained austenite phase. But in the present work, the reduction in creep rate with time is attributed to avoiding this deformation by the strain-induced martensitic transformation of the retained austenite. *Read more* (<https://herald.uohyd.ac.in/prestigious-indo-german-research-project-to-sest/>)