

KL05

Prof. Rainer Fechte-Heinen

Leibniz-Institut für Werkstofforientierte Technologien - IWT,
Badgasteiner Str. 3, 28359 Bremen, Germany, fechte@iwt-bremen.de
MAPEX Center for Materials and Processes, University of
Bremen, 28359 Bremen, Germany

November 14 (Tue.) 16:20-17:00 Room 304



Quenching and Distortion

This Key Note Lecture will first give a brief overview of the fundamentals of distortion formation. The mechanisms and the systematics of unavoidable dimensional and shape changes based will be explained. The distortion potential with its carriers and the method of Distortion Engineering will be discussed.

Furthermore, some distortion-related aspects of quenching technology are discussed. A differentiation is made between evaporating quenching media and gas quenching.

Finally, selected examples are presented which illustrate the relationships between distortion and the quenching process. The examples were selected from all three levels of Distortion Engineering.

Please also see the extended abstract.