

Call for Papers

An abstract of maximum 300 words should be submitted electronically before acceptance, preferably in Word or as PDF file to papers@echt-qde-2021.de. The abstract should include the title of the paper, the authors names and addresses, telephone and fax numbers and e-mail addresses. If possible the name of the lecturer should be given, too. All presented papers will be published in the Conference Proceedings. Selected papers will undergo a review process in order to publish them in a Special Issue of

- HTM Journal of Heat Treatment and Materials (www.htm-journal.de)
 - Materials Science & Engineering Technology (<https://onlinelibrary.wiley.com/journal/15214052?tabActivePane=>)
- Only English language shall be used for all abstracts, papers and presentations.

Schedule

Deadline for abstracts	30 th September 2020
Notification of acceptance	04 th December 2020
Preliminary program	29 th January 2021
Deadline for full papers	14 th February 2021
Conference	26 th – 28 th April 2021

Online Registration and submission for papers on:

www.echt-qde-2021.de



Conference Venue

Abion Hotel Berlin

www.ameronhotels.com/en/berlin-abion-spreebogen-waterside

Looking forward to seeing you in Berlin!

Organizer

AWT)))

Arbeitsgemeinschaft
Wärmebehandlung + Werkstofftechnik e.V.

Mrs. Hella Dietz
(Conference Manager)

Paul-Feller-Straße 1, 28199 Bremen, Germany

Tel. +49 421 522 93 39 – Fax +49 421 522 9041

info@echt-qde-2021.de

www.echt-qde-2021.de



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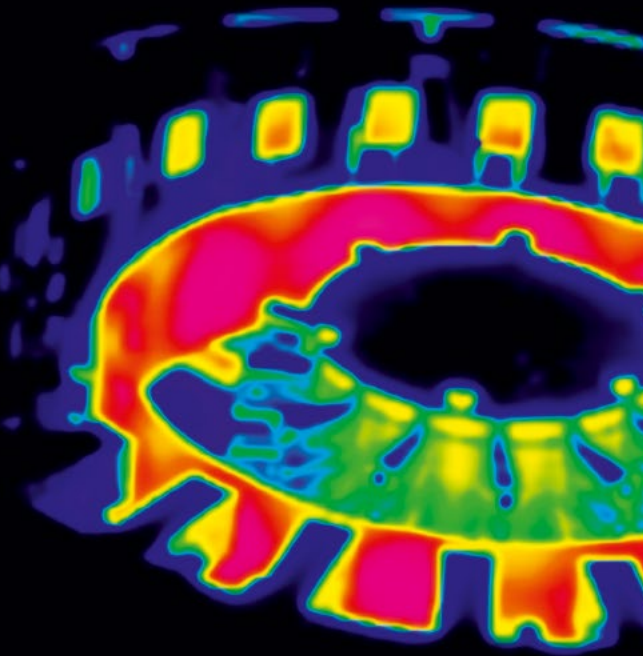
QDE
Quenching and
Distortion Engineering

ECHT
European Conference
on Heat Treatment

ECHT 2021 and QDE – 2nd International Conference on Quenching and Distortion Engineering

26 – 28th of April 2021 in Berlin, Germany
and ONLINE

Call for papers



ECHT 2021 and 2nd QDE Conference

Invitation

The Quenching and Distortion Engineering conference series follows up on the former series of IDE, organized by IWT Bremen, Germany, and QCD, organized by IFHTSE. These two have been merged into the QDE series. In 2021 the QDE conference is also part of the **E**uropean **C**onference on **H**eat **T**reatment (ECHT) series which is supported by european organisations. Consequently the ECHT and QDE conference will cover both aspects:

- the quenching process as an essential step in the heat treatment of metallic components and
- the relation of the distortion potential of a component with all steps of the manufacturing process especially quenching.

ECHT and QDE 2021 will present research and practical procedures relative to the control of a component's distortion by an interdisciplinary approach starting at the design phase up to the final heat treatment and eventual hard machining, including, most prominently, quenching. It will discuss the state of the art and novel solutions in efficient and economic facilities, media and procedures for the quenching process as well as basic mechanisms and interactions between different production steps leading to distortion and the measures to control changes in shape and dimensions including modeling and simulation in industrial production processes of metallic parts.



Dr.-Ing. Jörg Kleff / ZF Friedrichshafen AG



Dr.-Ing. Thomas Lübben / Leibniz-IWT Bremen

Chairmen of the Conference

Main Topics

The conference addresses the following topics which require no strict adherence:

- Quenching facilities and controls
- Quenching media including their characterization, monitoring and servicing
- Quenching processes
- Measurement of distortion and residual stresses in general
- In-process measurement of deformations, stresses, and phase compositions
- Control of distortion
- Quality management aspects
- Interactions of different production processes
- Case studies on distortion problems
- Methods of distortion compensation
- Modeling of quenching and distortion related phenomena (e. g. heat transfer, phase transformation, plasticity, creep, transformation plasticity)
- Determination of boundary conditions (e.g. heat transfer) for process simulation
- Simulation of individual and subsequent processes such as casting, hot and cold forming, soft and hard machining, and heat treatment, including most prominently quenching

Who should attend?

Scientists, engineers and practitioners from academia and industry who are dealing with design, production planning, production processes, heat treatment, facilities planning and monitoring, and laboratory analysis of heat-treated metallic parts with distortion phenomena, including experts who work on modeling and computer simulation.

Aichelin Young Speaker Award

Especially young speakers under 35 of age shall be motivated to apply for this award. The award is endowed with the sum of 1500 €.



International Committee

Dr. Stefan Hock / IFHTSE
Bernard Kuntzmann / SVW
Dr. Klaus Löser / AWT
Danilo Petta / AIM
Prof. Reinhold Schneider / ASMET
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Eva Troell
Dr. Thomas Waldenmaier
Prof. Wei Shi

Terms and Conditions/Registration

The conference will initially be organized in such a way that a presence event in Berlin and a web-based conference will run in parallel. Web based and face-to-face presentations will be presented in the conference hotel as well as over the web. If the situation should require it, the presence event will inevitably have to be omitted. Invoices will only be sent out after a corresponding decision has been made. The costs for both types of the conference are listed on the homepage.