



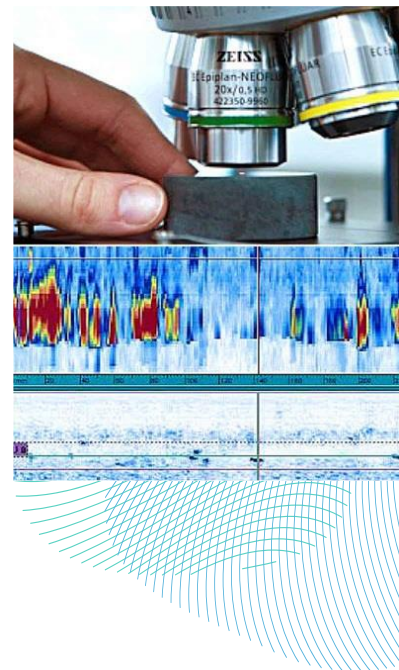
## Material Testing and Consulting

We offer an unique and holistic approach in materials engineering to detect and analyse possible causes for damages and coverings in your plant. Our experienced team supports you in every stage within material assessment, behaviour and -consulting.

New materials, applications, new designs and recent damages require testing techniques on a competent level, which may deviate from harmonised standards or must be applied in a modified context. For this purpose it is mandatory to select appropriate service provider, to closely surveil these companies in development and adaptation and to evaluate and at last qualify new procedures.

We offer a comprehensive determination of boundary conditions, coordination of the calculation and evaluation of results. By providing products for maintenance, new built, retrofit and repair projects, power plant inspections and failure analysis, we qualify as a competent partner.

Our expertise ranges from the assessment of relevant parameters in terms of manufacture, welding, commissioning and further operation to the damage description based on fabric changes, pores- and crack formation including mechanic-technological material testing to describe the strength- and tenacity behaviour.



### Your Benefits

#### The findings enable you to:

- Increase the safety for your employees and the plant
- Improve the lifetime management and customise maintenance strategy
- Follow advice in optimising component's design or repair options
- Get a more precise definition of the component's state and behaviour
- Optimise plant availability by decreasing the number of outages
- Understand the causes for damages and coverings in your plant





## Our Scope

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### Material analysis

- Materials testing
- Damage analysis and evaluation
- Root cause analysis
- Recording of geometry of components, set-actual comparison, 3D-scan of design of components
- Analysis of component execution
- Characterise strength and toughness behaviour
- Destructive- and non destructive testing
- Assessment of microstructures, deposits and surfaces
- FEM calculations

### Material consulting

- Consultancy on material and process technology
- Evaluation of residual life-time and service-exposed components
- Advice in repair options
- Advice on monitoring
- Performance of Research and Development projects



### Our Expertise

- Professional advice over the entire service life of power plant components
- Own laboratory for metallo- and fractographic investigations
- Development of specific testing techniques on component level
- Damage analysis and lifetime monitoring with innovative technologies
- Provision of specifications in material-, welding- and testing technology

### Contact:

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