

CastTec 2016



Cast iron - how safe is this tradition material?

This question is often asked by designers, who previously worked with steel weldments or have used special steel castings.

But cast iron - especially to mention the ductile graphite iron – is a reliable material that can be used for all weight classes.

Through years of research and development work at institutes and in foundries the cast iron material has "blossomed"!

You can see it on the large number of wind turbines, in which the good-natured material GJS 400 18 U LT has been used for years throughout the world, not to mention the other applications in the automotive sector, in press manufacturing, at engine blocks etc.

Especially with the recent application in the field of wind turbines, the security by a fracture mechanics assessment of loads during operation additionally comes into play.

The big claim of a safe design according to the FKM guideline or according to GL guidelines is the operational reliability in the "life" of a component.

It is this reliability which nowadays can be precalculated very detailed for each cast component, because there are simulation programs for the analysis.

All these engineering ideas will be presented in technical papers at the next international conference CastTec2016 at Darmstadt, Germany.

The order of performance is characterized by three topics that represent these subject areas:

- Material
- Process
- Component

These three topics are being accompanied by multiple affiliated scientists and engineers.

On the CastTec2014 papers were presented on topics that will be continued this year in November.

Perhaps also new about the high-tech strategy of the federal government can be heard with "Industry 4.0", because the digital world is increasingly influencing the industrial processes.

In addition to the technical presentations, which will be simultaneously translated, an accompanying technical exhibition will take place at which companies present their scope of supply and the opportunity is given to hold discussions with colleagues.