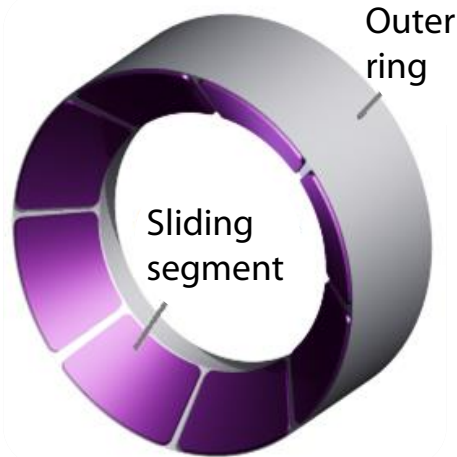


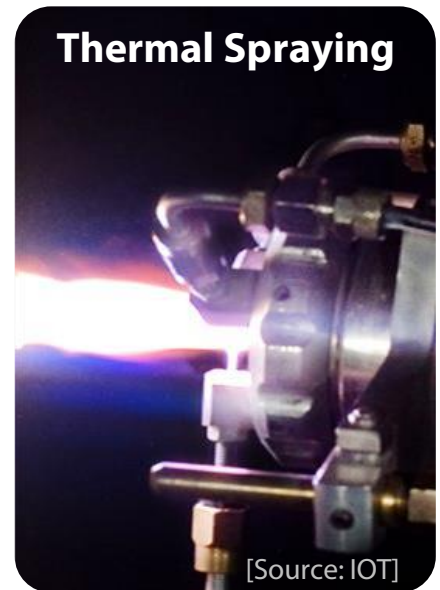
Topic: Thermally sprayed hydrodynamic main bearing



Wind turbines



Sliding bearing



Thermal Spraying

[Source: IOT]

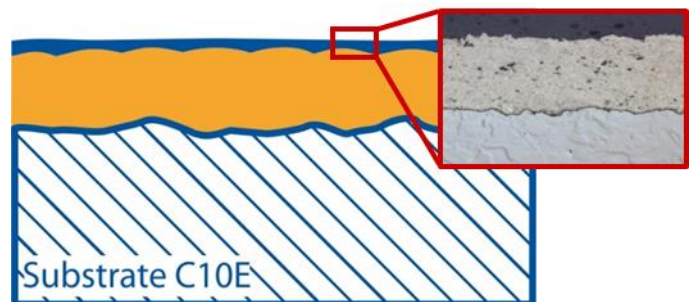
Abstract:

For the main bearings of wind turbines, rolling bearings are currently used without exception. They are co-responsible for high down times since the disassembly of the whole rotor is often necessary for the replacement. In terms of replaceability, sliding bearings provide a major advantage regarding the structural design as they can be designed in a segmented way.

The use of a sliding bearing under these special conditions requires innovative material concepts and production processes. One innovative approach to meet these special challenges is the application of new bearing materials as a coating on the functional surfaces. In this context thermal spraying offers high flexibility since the properties of the functional surface can be adjusted by the choice and combination of different materials and can be modified according to the application.

Task:

- Development of innovative sliding bearing coatings as a substitution for main bearings of wind turbines
- Process optimization for thermal spraying
- Tribological tests for material validation



Multilayer coating concept



Thermal spraying of tin bronze

Requirements:

You are studying mechanical engineering, materials science or a comparable course of study? You are interested in surface technology, bearings, tribology and wind energy? Then please contact us!

If you are interested, we can arrange an appointment to discuss further details.
Just contact me by e-mail or phone.

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