

Project:

Contact person/customer: Patrick Carl

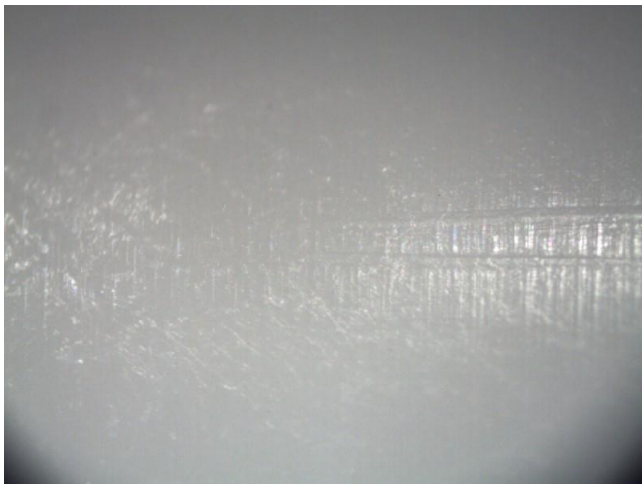
Aim of this investigation Does the action of the water lead to any negativ changes in the performance of plain bearings.

Test description and results:

The task was to clarify whether a damage/influencing of the materials by erosions, e.g. ff PTFE or other surface alterations, are to be expected due to the long-term action of water.

For this purpose, the plain bearing materials listed below were constantly flushed with water. A total of approx. 688,000 litres of water have flowed through the plain bearings.

Surface appearance:



iglidur® A180 before



iglidur® A180 after

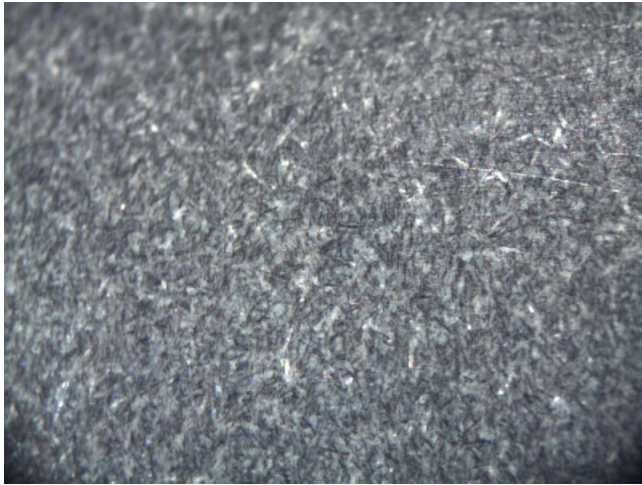


iglidur® H4 before

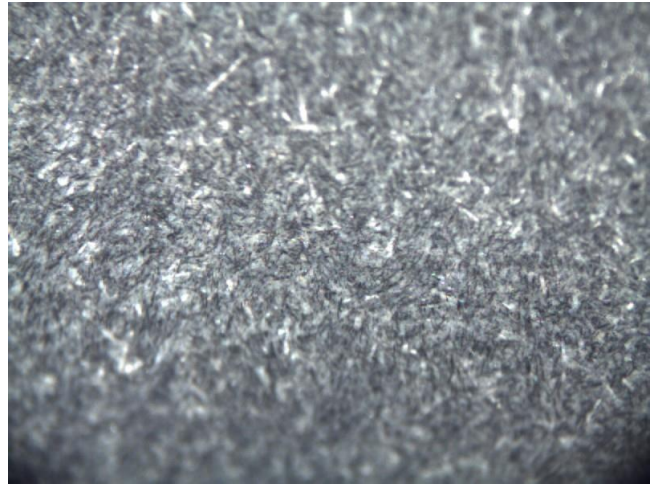


iglidur® H4 after

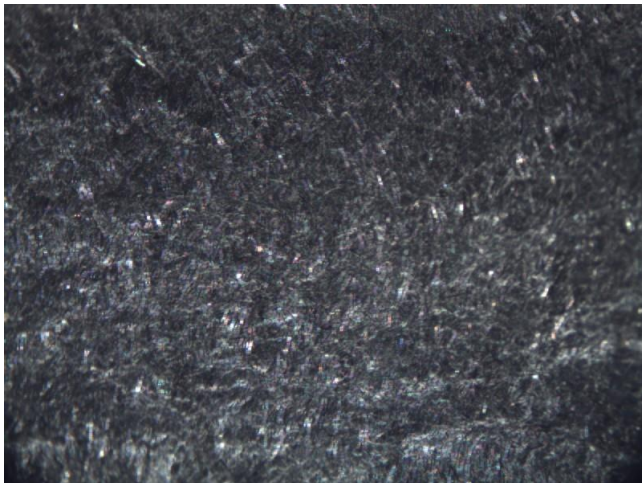
The above specifications show the results of performed tests. All specifications are neither one or more guarantees of specific properties nor one or more guarantees about the suitability of a product for a particular purpose, since the tests took place under laboratory conditions. The guarantee of specific properties of the products and/or its suitability for a particular application must be in written form in the order confirmation. As the results were obtained under laboratory conditions that can almost never simulate the real use, we recommend application-specific measurements under real operating conditions.



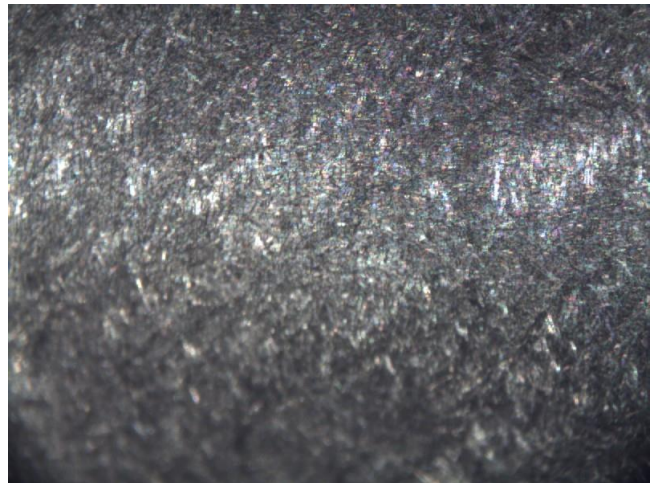
igidur® H370 before



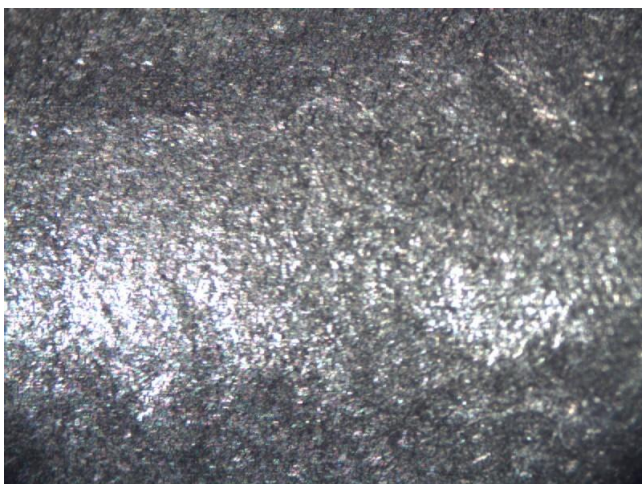
igidur® H370 after



igidur® UW before



igidur® UW after

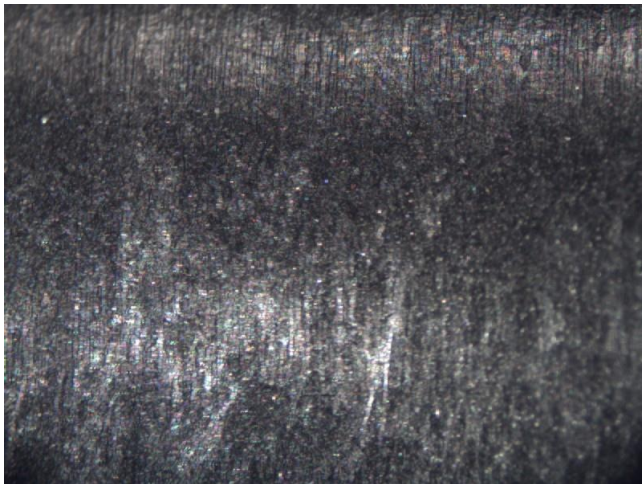


igidur® UW500 before

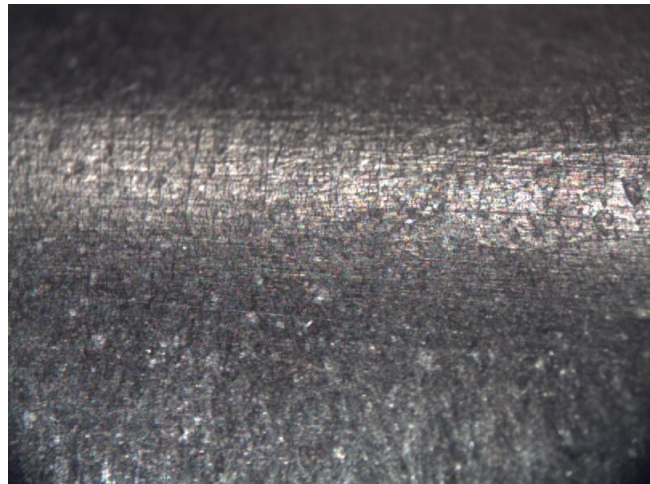


igidur® UW500 after

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igidur® X before

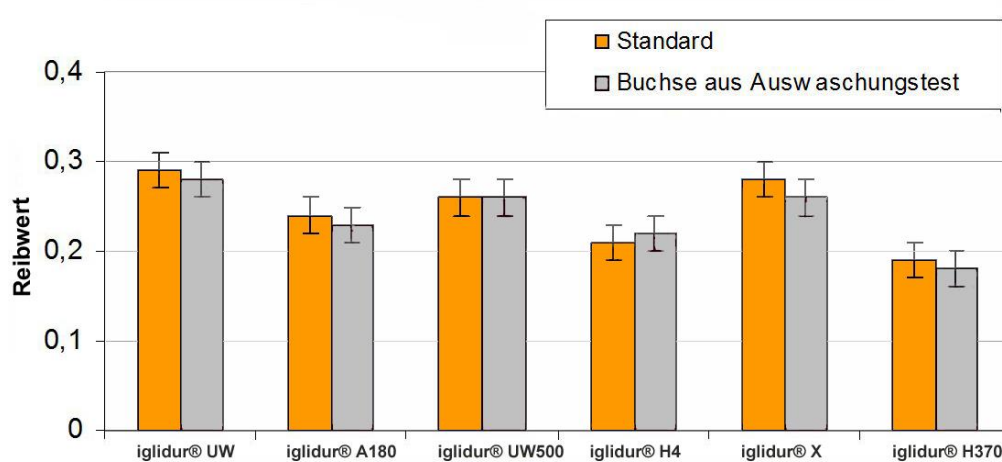


igidur® X after

With the aid of the microscope (40-fold magnification) no erosions or other surface changes could be detected.

Furthermore, the coefficients of friction of the materials were examined. No significant differences between relatively new parts and those that were in the "erosion test" could be determined.

Friction coefficient comparison; $p=0.7$ MPa; $v= 0.15$ m/s; Cf53 shaft



Conclusion: The action of the water performed here has not led to any traceable change in the plain bearings.

Prepared by:	Dr. Ralf Selzer / Development	Date:	20.11.2006	Distribution:	Technical Marketing, Development
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