iglidur® test report

Project: igus GmbH

Contact person / customer: Lutz Alof, Kai Schmitz

Objective of test: Wear analysis against galvanised shafts

Test description and results:

The customer uses the iglidur® all-rounder iglidur® G on galvanised shafts and wants to increase the service life of the application. Since these shafts are not normally tested at igus, the shafts were obtained from igus to perform separate tests on galvanised shaft material.

The parameters of the test performed on our medium load pivot test rigs are listed below:

Plain bearing:	SM-2023-20 (various materials)
Movement:	oscillating
Load:	26 MPa
Speed:	0.01 m/s
Counter partner:	galvanised St- 52
Run time:	20,000 cycles

The results of the test are presented in diagram 1.

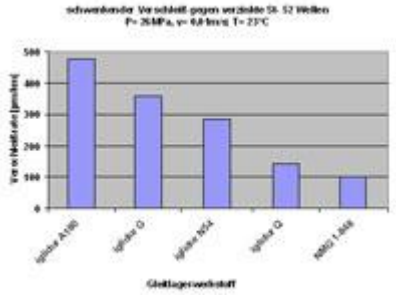

Diagram 1: Wear results

Diagram 1 shows a clear improvement in the wear rate with the two materials iglidur Q and NMG 1-848 compared to iglidur G.

Conclusion:

With the two materials iglidur Q and NMG 1-848, the wear rate could be reduced against the galvanised St-52 shafts on the test rig in the igus laboratory. The lowest wear rate could be achieved with the new material NMG 1-848.
The iglidur Q material is not much worse, see diagram 1. Further improvements, for example, are undertaken in the material NMG 1-848.

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