

# PRODUCT INFORMATION

## EASECAST® – SUPERIOR PROPERTIES

**Friction and wear** are important properties when it comes to an industrial application. KS Gleitlager GmbH, a subsidiary of Rheinmetall AG, is more than aware of this due to their decades of experience in the field of plain bearing applications for a wide range of areas. This knowledge, gathered over the course of this time, was therefore incorporated into developing the new lead-free EASECAST® materials. During in-house load-stage adaptation tests, in which the normal force applying the load on the bearing is increased in stages and the arising friction is measured in the form of the torque change, EASECAST® EC7 as well as EC12 achieved very good adaptation and wear values with good emergency running properties. The results were at least comparable, in part even considerably better, than the standard material containing lead.

### EC7 – THE ALTERNATIVE TO RG7 (CC493K)

Rg7 (CC493K) and EASECAST® EC7 provide very similar test results under low load. Whilst Rg7 (CC493K) reaches the hydrodynamic state slightly more quickly in the lower two load stages, the standard material containing lead tends to exhibit higher wear from the third load stage. In contrast to the lead-free material EC7, Rg7 (CC493K) exceeds its load limit at the highest load stage. This means the lead-free material EC7 offers consistently good adaptability, which exceeds that of the standard material containing lead under medium and higher loads (Fig. 1 and Fig. 2).

### EC12 – THE ALTERNATIVE TO GBZ12 (CC483K)

In the test, the innovative lead-free material EASECAST® EC12 considerably surpasses the standard material Gbz12 (CC483K) containing lead (Fig. 3). Whilst the behaviour is still identical in the first load stage, in all subsequent load stages EC12 surpasses the adaptability of the standard material. In load stage 4, the standard material Gbz12 (CC483K) containing lead reaches its load limit. It was only the lead-free material EASECAST® EC12 that was able to complete the test undamaged, even in the highest load stage 5.

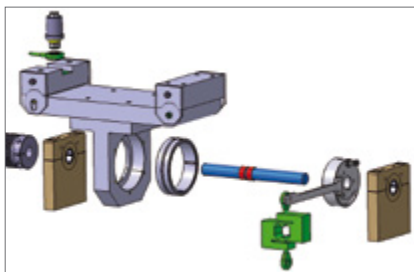


Fig. 1: Test set-up to determine the tribological properties

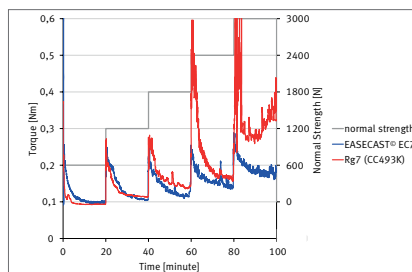


Fig. 2: Adaptability of EC7 in comparison to Rg7 (CC493K)

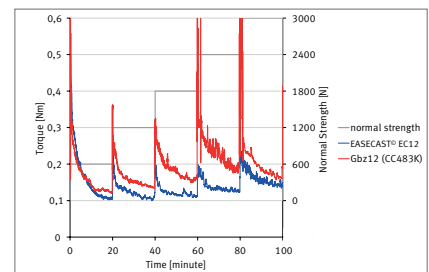


Fig. 3: Adaptability of EC12 in comparison to Gbz12 (CC483K)