

Date: 22.03.2010  
Subject: 9 M 32 Crankshaft

Engine type: **M 32**  
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### **MaK 9 M 32 Main Propulsion Engines Crankshafts of Variant -03**

We have to point out that for reasons that are still unknown a small number of engines of type 9 M 32 with an operating time of approximately 20,000 to 30,000 hours have been affected by cracks on the crankshaft. Apparently, these cracks occurred in the contact face of the counter weights. In isolated cases these cracks caused a crankshaft breakage and damage to other components of the engine.

Our special focus in this context is on a few engines which are equipped with a crankshaft of variant -03 and used as main propulsion engines. Operators who are affected by this and have not yet been contacted, will be contacted promptly. We do not assume that any crankshaft cracks will occur outside of the population mentioned above. However, as the causes of these cracks have not yet been clarified, we cannot completely exclude this.

There is a risk of crankshaft breakage whenever a crack remains undetected over a longer period of time. The probability of a crankshaft breakage causing danger to the personnel in the engine room is to be considered as rather low. Nevertheless, as a general precaution the personnel should avoid staying directly next to the engine unless required.

Currently we are carrying out root cause investigations together with affected operators and are also taking into consideration external influences. In order to gain further insights we are carrying out sample tests on different engines. Finally, we are developing measures to eliminate the possibility of any cracks occurring. We will naturally keep you updated on the results of our activities.

If you have received a memorandum of the Verein Hanseatischer Transportversicherer on this subject, please contact us immediately. Such memorandum can be understood as a request to check the contact faces of the crankshaft counter weights. Such a check, however, may only be carried out by authorized service personnel which is specially qualified and has the appropriate tools. If such checks are not carried out properly, there is a considerable risk of counter weights loosening from the crankshaft during further operation, causing extensive damage to the engine and putting the personnel in the engine room at considerable risk.

If you have any further questions please do not hesitate to contact us.