

Cummins KTA19G3 camshaft / MAN 6L1624 in licensee-built engine



Dear ERS Participants and surveyors,

During analysing the ERS input two specific damages came to light, which both indicate to be of a structural nature being:

Cummins KTA19G3 camshaft

It is suspected that damage to the camshaft of forementioned engine is the result of long-term low load operation. The Cummins generator engine type is equipped with a variable injection system for the injectors, also called STC (Step Timing Control).

Engines, equipped with an STC system, run during start-up and at low load in 'advanced timing' mode. This means that the fuel is injected earlier using oil pressure, controlled by a STC control valve. This appears to result in a higher mechanical load on the contact surfaces of the fuel cam and cam follower, with detrimental effects on the lubricant film. It's stated that the Dutch representative of the engine manufacturer (Cummins) confirmed that they are familiar with this issue. However, no official correspondence was sent to the owners of Cummins engines regarding this matter.

During repair or overhaul, the cam follower is stated to be modified and fitted with a modified cam. The modified cam is slightly wider and spherical in shape.

MAN 6L1624 in licensee-built engine

The cylinder head and cooling water jackets of this in licensee-built MAN auxiliary engines appears to be not constructed correctly according to specification. The bores of the valves and cam followers are not aligned and out of specifications.

For both cases IVR feels a pre-alert is valid.

In relation to this per-alert we would like to invite you to share any information you might have with respect to forementioned or similar cases, to enable us, together with the ERS Board of Surveyors establish if indeed these cases are to be qualified as structural failures which require a follow up with the manufacturer / dealers to discuss preventive measures, modifications and possible communication to parties interested. Your views, input and information concerning the above or similar cases can be send by email to h.arntz@ivr-eu.com. Your information will be dealt with confidentially.

Your input and assistance in these matters are much appreciated.

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