



# Technical Circular

No.: 036/2025

Date: 18<sup>th</sup> December 2025

## **Subject: Lessons learnt from Auxiliary Engine Damage Incident / Casualty**

1. This circular highlights safety concerns arising from damage to an auxiliary engine reported on a vessel classed with IRS. The damage to auxiliary machinery occurred immediately after completion of a major overhaul. During the post-overhaul trial run, the engine was stopped and subsequent examination revealed seizure of the thrust bearing along with scoring damage on three main bearings. The damage extended to the crankshaft and bearings, rendering the machinery inoperative.

The incident resulted in the loss of auxiliary power, with the auxiliary engine remaining non-operational until the supply and installation of original OEM spares required for permanent repair.

2. The investigation established that the auxiliary engine suffered thrust bearing seizure and associated bearing damage due to the incorrect supply of thrust bearing with inadequate clearance, not in accordance with OEM specification.
3. Based on lessons learned from this incident, implementing the following measures can significantly mitigate the risk of recurrence:
  - a. Establish strict procurement protocols ensuring only OEM-certified or class-approved spares are supplied.
  - b. Ensuring the correct spare is ordered quoting the correct identification number from makers manual.
  - c. Ensuring the implementation and diligent adherence to mandatory pre-installation dimensional checks, including verification of clearances and tolerances for bearings and other precision components.
  - d. Joint verification by Chief Engineer and Owner's technical superintendent before fitting critical spares.
  - e. Ensure the maintenance of comprehensive traceability records for all critical components, including batch numbers, clearance certificates, and associated documentation, to verify conformity with OEM specifications and regulatory requirements.
  - f. Enhanced post-overhaul trial protocols with extended monitoring periods and detailed log entries.
  - g. Conduct of required vibration and temperature trend analysis after major overhauls.
  - h. Conduct refresher training for ship staff on OEM specifications and acceptance criteria for critical engine components.
  - i. Strengthen communication with suppliers to ensure compliance with OEM standards.
  - j. Introduce periodic internal audits of spare part supply chains.



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4. Owners & Managers are to take note of above in order that corrective actions can be taken to avoid similar situations in future.

**Enclosure:** Nil.

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