

Wärtsilä Performance upgrade for Vasa 32LN

An ageing VTR turbocharger can affect engine performance, increase specific fuel oil consumption (SFOC) and limit the maximum power output. The Wärtsilä Performance upgrade for Vasa 32LN engines is a comprehensive, tailored package that boosts engine performance, reduces operating costs and increases operational flexibility – all while helping you to comply with increasingly strict emission requirements.

TECHNICAL CONCEPT

The upgrade is suitable for all Wärtsilä Vasa 6R32LN and 12V32LN installations that mainly operate between 50% and 100% load. In addition, Vasa 32 engines manufactured after 1991 may also be upgraded. The process involves replacing the VTR turbocharger with a modern, state-of-the-art, high-efficiency turbocharger, enabling the use of earlier inlet valve closing, known as the Miller concept. The upgrade reduces SFOC by up to 5 g/kWh, according to laboratory tests performed with an engine running at 85% load.

KEY BENEFITS

- Enables fuel savings of up to 5 g/kWh
- Reduces maintenance costs
- Enables reduction in NO_x emissions in line with IMO Tier I and Tier II limits
- Increases operational flexibility
- Increases TC speed margin by 10%
- Payback period as short as two years





SCOPE OF SUPPLY

The upgrade is a package solution that includes all the necessary parts. Wärtsilä technicians will determine the need for engine tuning on a case-by-case basis and perform onsite adjustment of the engine in accordance with the best available setup. The engine room dimensions will need to be determined in advance in order to ensure there will be no interference with existing structures or installations.

Delivery includes:

- New turbocharger
- New camshaft for advanced Miller inlet valve timing
- Engine tuning
- SOLAS insulation for the turbocharger
- Automation components
- Components needed to install the new turbocharger on the engine
- Installation and commissioning

The upgrade is particularly recommended for installations operating in extreme conditions where high environmental temperatures limit the engine's maximum continuous rating.

	SFOC reduction	Turbocharger maintenance cost reduction ¹
VTR304 vs. TPS61 at 85% load	-5.0 g/kWh	-30%
VTR304 vs. TPS61 at 75% load	-4.5 g/kWh	-30%

¹ Calculated over complete turbocharger lifetime

WHY CHOOSE WÄRTSILÄ?

Wärtsilä offers a proven solution with performance data confirmed both in the laboratory and in the field. We serve you wherever you are via our global service network and a team of certified service engineers. We also have classification approvals available for marine engines and can offer the longest warranty in the industry for both equipment and spare parts.

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