

# Tier II upgrade

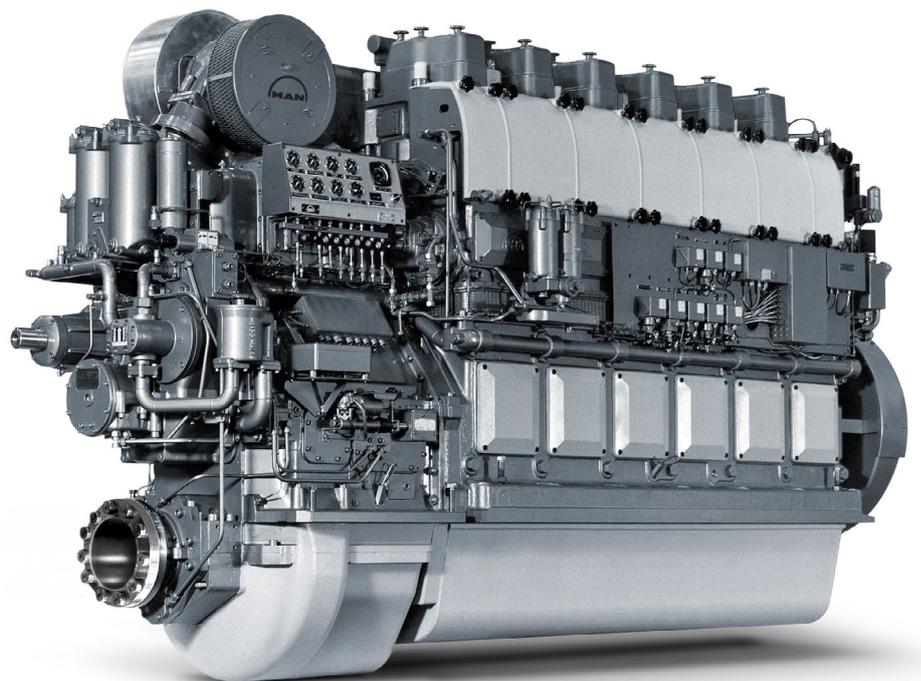
## MAN PrimeServ

**With the introduction of IMO Tier regulations in MARPOL Annex VI, vessels with medium speed engines must comply with Tier II regulations globally and Tier III regulations locally in ECA areas.**

The pre-2011 four-stroke L23/30, L27/38 and L28/32 medium speed engine types were not designed for Tier II compliance. However, MAN Energy Solutions has launched a Tier II upgrade kit to recertify the engines to Tier II compliance.

The upgrade and Tier II compliance is obtained by internal engine modifications, i.e. simple exchange of components. The exact scope of modification depends on the specific engine type.

The ship's crew normally carries out the Tier II upgrade with the support of a MAN Energy Solutions superintendent who has expert knowledge of the propulsion configuration. The Tier II upgrade can be performed while overhauling the engine in connection with planned maintenance.



# Tier II upgrade

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### Key benefits

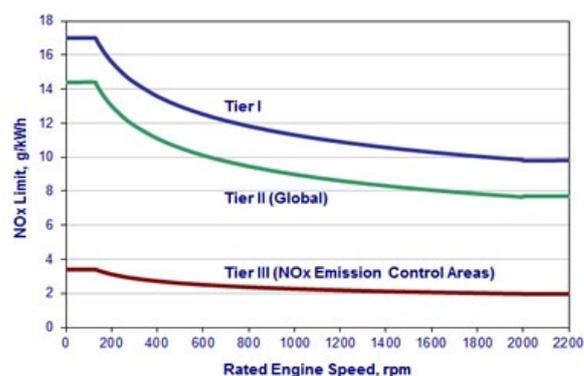
- Lower emission levels  
Compliance with regional and local legislation on emission levels
- Tax reduction as local authorities have introduced, or may introduce, emission fees
- New certification for EIAPP
- No on-board emission measurements required

### Scope of supply

- All relevant IMO components, according to the MAN Energy Solutions parent engine certificates
- New technical file to achieve the EIAPP certificate from the relevant classification society

### Applicability

Applicable for the MAN engine types L23/30, L23/30A, V23/30A, L27/38, L28/32, L28/32A, V28/32A



### Retrofit & Upgrades

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### More information

Would you like to know more about the product, and how our upgrade solutions can improve your propulsion configuration? Then do not hesitate to contact your local MAN PrimeServ office to receive more information about the upgrade!

### MAN Energy Solutions

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