

# Adaptive Cooling

## MAN Asset+

**Adaptive Cooling is an optimized cooling system for engines with exhaust gas recirculation. It controls the amount of cooling water flowing to the scavenge air cooler (SAC) and the exhaust gas recirculation cooler (EGRC), depending on the engine operating mode.**

### Reduces power consumption for coolant circulation

Standard cooling systems use the same amount of freshwater for cooling irrespective of the engine running mode, and thus always consume the same amount of energy. Adaptive Cooling saves energy by adapting coolant water flow to the engine operating mode.

Adaptive Cooling is one of many MAN Asset+ solutions to raise ship performance, which keep your equipment up to date, and help you comply with environmental regulations, advancing your operations further towards energy transition and decarbonization.



#### Less energy needed for coolant circulation

The system adapts coolant flow to the engine running mode, which reduces energy consumption when running in Tier II or turbocharger (TC) cut-out mode.



#### Improved CII rating

Reduced energy consumption also has a positive impact on the CII rating.



#### Reduced fuel consumption

Less electricity is used for cooling purposes, resulting in lower fuel consumption.

# Adaptive Cooling

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The amount of energy saved when running the engine in Tier II or turbocharger cut-out mode depends on the engine type and size.

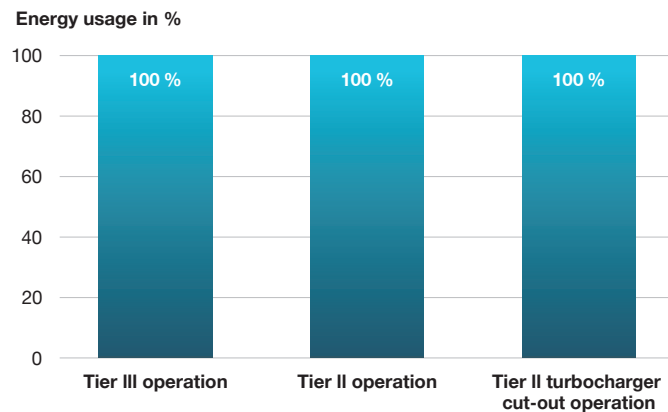
Adaptive Cooling helps make your engine more ...



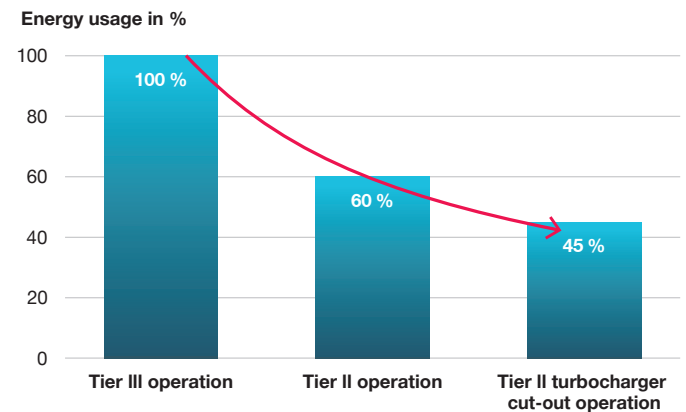
Efficient

Guiding example: Relative energy savings for an EGRTC cut-out engine

## Standard cooling system



## Adaptive Cooling



## Upgrade your cooling system

Adaptive Cooling uses a specially designed piping and valve arrangement that controls the amount of cooling water flowing to the scavenge air cooler and the exhaust gas recirculation cooler, depending on the engine operating mode (Tier II, Tier III, or turbocharger cut-out mode).

## Availability for new engines

This optimized cooling system for MAN B&W two-stroke engines with exhaust gas recirculation (EGR) can be added as an Asset+ solution for all new EGRBP and EGRTC engines.

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