

Market Update Note



11 February 2020

New low-load optimised engine tuning

New tuning method improves part-load SFOC for G95ME-C Mk. 10 engines

MAN Energy Solutions introduces a new low-load optimised engine tuning for G95ME-C Mk. 10 engines. New control methods for fuel injection (sequential fuel injection) and turbocharger optimisation give improved SFOC at part load.

Sequential fuel injection is introduced primarily to control the NO_x emission level in the high-load area. A new fuel booster injection valve (FBIV) with individual control has been developed for sequential injection. The new FBIV enables independent control of the fuel injection for each fuel valve.

Optimised turbocharging is introduced in order to improve SFOC in the low-load area with limited impact on the NO_x emission level.

Compared to existing low-load tuning methods, SFOC reductions are:

- 100% load: 0.0 g/kWh
- 85% load: -1.5 g/kWh
- 75% load: -1.5 g/kWh
- 50% load: -3.0 g/kWh
- 25% load: -3.0 g/kWh

An engine with the new low-load tuning is designated G95ME-C10.6 LL-SEQ. The engine tuning is available for Tier II engines, Tier III engines with exhaust gas recirculation T/C cut-out (EGRTC), Tier III engines with low-pressure SCR (LPSCR) and Tier III engines with high-pressure SCR (HPSCR).

Fig. 1 shows SFOC for a low-load tuned G95ME-C10.6 LL-SEQ and a G95ME-C10.5 with existing low-load tuning (engine process tuning (LL-EPT)).

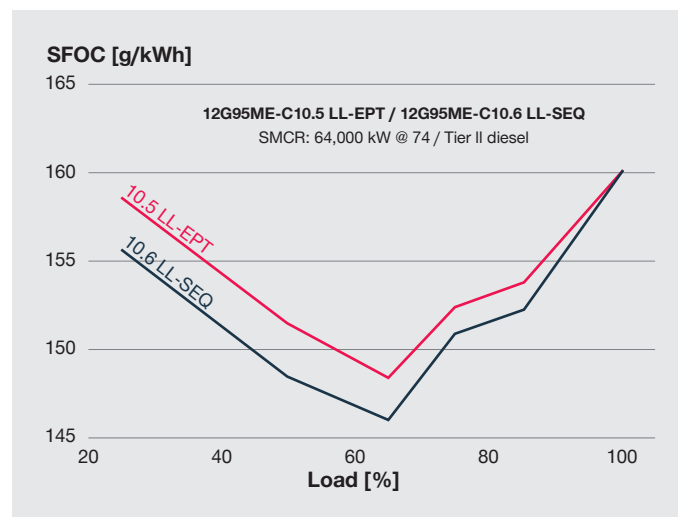


Fig. 1: SFOC for 12G95ME-C10.5 LL-EPT and 12G95ME-C10.6 LL-SEQ

CEAS will be updated as soon as possible, but data is available on request.

Please do not hesitate to contact our Two-Stroke Sales & Promotion department at kjeld.aabo@man-es.com for further information regarding this Market Update Note.

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