Market Update Note

MUN2017-10-16

Improved SFOC with S50ME-C9.6 and G50ME-C9.6

We have decided to introduce new S50ME-C9.6 and G50ME-C9.6 type engines with optimised performance.

These upgraded versions have been included in the second edition of the Marine Engine Programme 2017, which was released in September.

S50ME-C9.6

Measures:

- updated performance strategy
- efficiency optimised three-piston ring pack.

Results for diesel and dual fuel engines:

- 2 g/kWh SFOC reduction at 100% load for HL tuning
- 3.5 g/kWh SFOC reduction at 85% load for LL-EGB tuning
- optimised heat load.

The preliminary list of design changes compared to the S50ME-C9.5 is as follows:

- cermet-coated three-piston ring pack
- new piston crown with improved cooling
- new cylinder liner
- possible change of T/C configuration
- new fuel injection nozzle.

G50ME-C9.6

Measures:

- updated performance strategy
- efficiency-optimised three-piston ring pack
- updated combustion chamber.

Results for diesel and dual fuel engines:

- 1 g/kWh SFOC reduction at 100% load for HL tuning
- 2.5 g/kWh SFOC reduction at 85% load for LL-EGB tuning
- optimised heat load.

The preliminary list of design changes compared to the S50ME-C9.5 is as follows:

- cermet-coated three-piston ring pack
- new piston crown with improved cooling
- new cylinder liner
- new cylinder cover
- possible change of T/C configuration
- new fuel injection nozzle.

For your further reference we have included the actual engine data pages from the new Marine Engine Programme 2017 – 2nd edition.

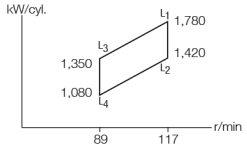
Market Update Note

MAN B&W S50ME-C9.6

Tier II

Cyl.	L_1 kW
5	8,900
6	10,680
7	12,460
8	14,240
9	16,020

Stroke: 2,214 mm



Fuel Oil

L_1 MEP: 21.0 bar

MAN B&W S50ME-C9.6

L_1 SFOC [g/kWh]

SFOC-optimised load range	Tuning	50%	75%	100%
High load	-	163.5	162.5	167.0
Part load	EGB	161.5	161.0	169.5
Low load	EGB	159.5	162.0	169.5

Dual Fuel Mode for GI (Methane)

L_1 MEP: 21.0 bar

MAN B&W S50ME-C9.6-GI

L_1 SFOC equivalent gas + pilot fuel (42,700 kJ/kg) [g/kWh]*

SFOC-optimised load range	Tuning	50%	75%	100%
High load	-	159.5	158.5	166.0
Part load	EGB	161.5	161.0	169.5
Low load	EGB	159.5	162.0	169.5

L_1 SGC 50,000 kJ/kg (SPOC pilot fuel 42,700 kJ/kg) [g/kWh]

SFOC-optimised load range	Tuning	50%	75%	100%
High load	-	129.5 (7.9)	130.3 (6.0)	137.5 (5.0)
Part load	EGB	131.0 (8.1)	132.3 (6.2)	140.4 (5.1)
Low load	EGB	129.3 (8.1)	133.2 (6.2)	140.4 (5.1)

* *Gas fuel LCV (50,000 kJ/kg) is converted to fuel oil LCV (42,700 kJ/kg) for comparison with a fuel oil operated engine.*

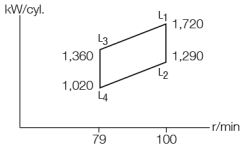
Note: Also available for GIE and LGIP.

MAN B&W G50ME-C9.6

Tier II

Cyl.	L_1 kW
5	8,600
6	10,320
7	12,040
8	13,760
9	15,480

Stroke: 2,500 mm



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* *Gas fuel LCV (50,000 kJ/kg) is converted to fuel oil LCV (42,700 kJ/kg) for comparison with a fuel oil operated engine.*

Note: Also available for GIE and LGIP.

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